AMERICAN JOURNAL

OF

OPHTHALMOLOGY

THIRD SERIES FOUNDED BY EDWARD JACKSON

VOLUME 37 January-June, 1954

EDITORIAL STAFF

DERRICK VAIL, Editor-in-Chief LAWRENCE T. Post, Consulting Editor

BERNARD BECKER
WILLIAM L. BENEDICT
FREDERICK C. CORDES
SIR STEWART DUKE-ELDER
EDWIN B. DUNPHY
F. HERBERT HAESSLER
PARKER HEATH
S. RODMAN IRVINE
JAMES E. LEBENSOHN

DONALD J. LYLE
WILLIAM A. MANN
P. ROBB McDonald
FRANK W. NEWELL
JOHN V. V. NICHOLLS
ALGERNON B. REESE
PHILLIPS THYGESON
M. URIBE TRONCOSO
ALAN C. WOODS

KATHERINE FERGUSON CHAIKLEY, Manuscript Editor MILDRED SKINNER, Advertising and Business Manager

COLLABORATORS

K. W. Ascher, Cincinnati; Charles A. Bahn, New Orleans; Theodore Bisland, Washington, D.C.; Eugene M. Blake, New Haven; Frederick C. Blodi, Iowa City; Sylvan Brandon, Houston; James W. Brennan, Bufalo; Alston Callahan, Birmingham; Francis C. Crage, Chicago; Beulah Cushman, Chicago; Louis Daily, Jr., Houston; Ray K. Daily, Houston; Alice R. Deutsch, Memphis; Orwin H. Ellis, Los Angeles; Irwin E. Gaynon, Milwaukee; Bertha T. Haessler, Milwaukee; David O. Harrington, San Francisco; Max Hirschfelder, Centralia, Illinois; Harry Horwich, New York; Morris Kaplan, Denver; Peter C. Kronfeld, Chicago; Vito Larocca, New York; Claude L. Larue, Shreveport, Louisiana; Gyula Lugossy, Budapest; Harry K. Messenger, Boston; Benjamin Milder, Saint Louis; Robert A. Moses, Delavan, Wisconsin; Bennett W. Muir, Denver; Joseph I. Pascal, New York; Edward Saskin, Brooklyn; Ernst Schmerl, Toledo; Theodore M. Shapira, Chicago; John J. Stern, Utica, New York; V. Tabone, Juliano, Malta; George S. Tyner, Denver; A. Urrets-Zavalia, Cordoba, Argentina; H. C. Weinberg, University Heights, Ohio.

PUBLISHED BY THE OPHTHALMIC PUBLISHING COMPANY
664 North Michigan Avenue, Chicago 11, Illinois

COLOR ILLUSTRATIONS—VOLUME 37, 1954

PLATE 1. Pseudo-exfoliation of the lens capsule: Relation to "true" exfoliation of the lens capsule as reported in the literature and role in the production of glaucoma capsulocuticulare. Figure a. Accretions on anterior lens surface, peeling off in form of a curl. Also deposits on posterior surface and pupillary margin of the iris. Figure b. High-power view of accretions on lens surface. Figure c. Midway between pupil and equator, deposits are feathery and branching. Figure d. Soft,	
fluffy-appearing accretions near equator of lens. Figure e. Accretions deposited on posterior iris surface, on ciliary processes, and zonular fibers. Figure f. Accretions deposited on ciliary body, zonular fibers, and anterior surface of vitreous.	
Figure g. Accretions filling intratrabecular spaces, canal of Schlemm, and external collector channel. Figure h. High-power view of Figure g. Georgiana Dvorak-Theobald	1
PLATE 2. Alpha irradiation: Effect of astatine on the anterior segment and on an epithelial cyst. Figure a. Gonioscopic view of anterior-chamber cyst, showing extension of cyst along angle wall. Figure b. Gonioscopic view of anterior-	
chamber cyst one month after treatment with astatine, showing sediment in the bottom of the sac. Figure c. Right eye of Monkey No. 8 three months after treatment with 200 mc. of irradiation. Figure d. Autoradiogram of thyroid, showing radioactive astatine in acini of partially destroyed thyroid gland. Robert N. Shaffer	196
PLATE 3. Anterior lenticonus. Review and case report. Figure 1. Anterior lenticonus as seen in the right eye of a 21-year-old man. This is a composite illustration, detailing the lens morphology as viewed with the biomicroscope. Bradley R. Straatsma, Michael L. Cancilla, and Anselm C. Hohn facing page	197
PLATE 4. Intra-epithelial cysts of the iris: Their production in young persons and possible significance. Samuel V. Abraham	327
PLATE 5. Endodiathermy: A method for sealing macular holes by transbulbar coagulation. Figure a. Endodiathermy coagulation sealing the macular hole. The drawing was made immediately after the transbulbar needle was withdrawn. Figure b. Co-	
agulation scar three months later. Angelos Dellaportafacing page	649

SUBJECT INDEX

Explanation: Numbers in boldface refer to original contributions.

Abnormalities: See under Congenital Anomalies and under names of various organs and regions Abscess, of eyebrows in twins, 642 ABSTRACTS: 130, 285, 451, 601, 812, 966 Anatomy, embryology, and comparative ophthai-mology: 130, 451, 812

2. General pathology, bacteriology, immunology: 131,

452, 601, 813 3. Vegetative physiology, biochemistry, pharmacology, toxicology, 132, 454, 601, 814

4. Physiologic optics, refraction, color vision: 137, 466, 605, 815, 966

605, 815, 766

5. Diagnosis and therapy: 141, 285, 470, 606, 816, 968

6. Ocular motility: 145, 286, 475, 609, 817, 970

7. Conjunctiva, cornea, sclera: 147, 287, 479, 609, 818, 970

8. Uvea, sympathetic disease, aqueous: 152, 292, 613,

9. Glaucoma and ocular tension: 154, 293, 616, 825, 974 10. Crystalline lens: 157, 297, 621, 828, 975 11. Retina and vitreous: 158, 298, 623, 829, 975

12. Optic nerve and chiasm: 306, 628, 831 13. Neuro-ophthalmology: 307, 629, 832, 975

Eyeball, orbit, sinuses: 310, 634, 833, 976
 Eyelids, lacrimal apparatus: 312, 635, 835, 977

16. Tumors: 315, 637, 836 17. Injuries: 318, 638, 837, 978

Systemic disease and parasites: 320, 639, 978
 Congenital deformities, heredity: 321, 641, 981

20. Hygiene, sociology, education, and history: 323, 641,

ACCOMMODATION: antagonist innervation of, 136 effect of drugs on, 136 eye focus and, 140 influence illumination on, 479

lens during, 139 motility of lens in, in aged, 605 of resting eye, 136

range through distance correction, 606 response to electric stimuli, 967

test for, 429

Acetylcholine, metabolism of, in visual pathways, 465 ACTH: 471, 472, 473, 607

in angioneurotic edema, 310 in angioneurote edema, 300
in retinitis pigmentosa, 627
in Sjøgren's syndrome, 472
value in eye disease, 282
value in eye disease, 282
Adaptation: dark, See Dark Adaptation
light, See Light Adaptation

Adaptometer, radium, to examine night vision, 138 Adenoma, hypophyseal, androgen steroids in, 629 Adie's syndrome, 833 Adnexa, hemangiomas of, 317

tumors of, 837

Age, histochemical examination of eye in relation to, 136 Air, injections of, glascoma induced by, 424 in traumatic hyphema, 409

Albinism, genetics of, 843, 846, 982 Alcohol, methyl: See Methanol

Allergenic extracts, in cataract treatment, 621

ALLERGY: cortisone in ocular, 462, 602 genetics of, 852

influence on eye disease, 601 iridocyclitis and, 614

Alopecia, repair of superciliary, 835 Alpha irradiation, 183

Alpha tocopherol, in diabetic retinopathy, 581 Amaurosis, during parturition, 586

idiotic, genetics of, 846 in pregnancy, 307

AMBLYOPIA: cerebral cortex activity in, 478 flicker stimulation in, 138

toxic, due to ethylpyridine, 629 AMA Section on Ophthalmology, program, June, 1954, meeting, 644

Ametropia, in visual field studies, 142 optogeometries in spectacles for, 467

AMINO ACIDS: action cocaine on, 135

action on retinal light sensitivity, 133 content lens after radiation, 602

free, in aqueous, 602 in cataract treatment, 621

Anemia, ocular complications in Mediterranean, 641 ANESTHESIA: action carotid injections curare in non-,

133 general, 474 in infants, 141

serial retrobulbar, 474 surface, Cornecain for, 465 topical, 141

ANEURYSM: arteriovenous of cavernous sinus, 967 of retina, 908

Angiography, cerebral, 55 anatomy in, 55

complications in, 55 in pre- and suprasellar tumors, 55

to diagnosis pituitary lesions, 308

Angioid streaks, pseudoxanthoma elasticum, arterial elastic degeneration and, 625 Angioneurosis, cerebrospinal pumping in ocular, 608

Ankylosing spondylitis, 848 Aniseikonia, heterophoria and, 146

Anisodominance, depth factors in, 91

Anisometropia, bicentric lens in, 706 Anisopia, depth factors in, 98

Anoxia: See also Retrolental Fibroplasia

ANTERIOR CHAMBER: absorption iodine into, 458 air injections into, glaucoma induced by, 424 changes in axial depth in glaucoma, 339 cortisone injections into, 137

cysts of, after iridencleisis, 153 delayed reformation of, and ocular hypertension, 297

depth changes, in glaucoma, 339

refraction changes due to, 469 iris in, 152 rose thorn in, 157 streptokinase toxicity to, 911 Anterior segment, crystals in, 456

ANTIBIOTICS: 431, 462 corneal regeneration and, 544

effect on eye, 460 in diplobacillar conjunctivitis, 290 in pyocyaneus ulcer, 538

in trachoma, 610 retention in cul-de-sac, 454

See also under names of various antibiotics Antihistamines, herpes and, 133

Aphakia, contact lenses in monocular, 139 AQUEOUS: amino acids (free) in, 602

chloride concentration in, 459 cholinesterase in, during Hydrazide therapy, 136 comparative chemistry of, in posterior and anterior

chambers, 460 comparison with spinal fluid, 463 cortisone, concentration in, 134 passage into, 134 electrophoretic study proteins of, 463

epinephrine in, 464 flow, in aqueous veins, 134 norepinephrine in, 464 outflow, clinical, 825

in glaucoma, 618, 826 trabeculum-Schlemm's system in, 293

rate of flow, hypotony due to reduced, 620 AQUEOUS VEINS: compensation maximum of Kleinert, 293

flow of aqueous in, 134 velocity of flow in, 918

Arteriosclerosis, fundus changes in, 160 hypertension and, 320

Arteritis, temporal, eye changes in, 640 eye involvement in, 980 Asphyxia, lens opacities due to, 602

Association for Research in Ophthalmology, program June, 1934, meeting, 643
Astatine, effects of, 183
ASTIGMATISM: checking corrections for, 605
corneal, due to pterygium, 609
graft fixation and, 290
Audiometric examination in eye disease, 470
Auroemycin, in retrobulbar neuritis, 833
in trachoma, 465
Autoplasm, in conjunctival injury, 150
Avagal, a new mydriatic, 134

B. pyocyaneus, corneal ulcer due to, 971

B. pyocyaneus, corneal ulcer due to, 971 infections, polymyxins in, 479, 480, 538, 610 See also Pseudomonas aeruginosa Bardet-Biedl syndrome, 641 Behçet's syndrome, 293 Beta irradiation: See Radiation therapy Biochemistry, ophthalmic, 134 to study glaucoma operations, 154 Biopsy, aspiration, in intraocular tumors, 473 BLINDNESS: after anesthesia, 458 after snake bite, 456 causes of, in young, 323 eclipse, 300 in infants, 642 BLOOD-AQUEOUS BARRIER: 603 and systemic stress, 694 during trauma, 604 herpetic affections and, 604 permeability, effect Avagal (Banthine) on, 825 effect Mintacol on, 825 vernal conjunctivitis and, 604 BLOOD: chloride concentration in, 459 eirculation of eye, glaucoma prognosis and, 154 cilioretinal arteries and, 303 supply of optic nerve, 451 BOOK REVIEWS:

Adler, Francis Heed: Physiology of the Eye, 283
American Foundation for the Blind, publications of, 447
Berens, Conrad, and Sheppard, L. B.: Abstracts on
Military and Aviation Ophthalmology and Visual
Sciences, 943
Bindt, Juliet: Handbook for the Blind, 127
British Medical Bulletin: Physiology of Vision, 599
Bulletin of the Belgian Ophthalmological Society, 448,

Bulletin of the Egyptian Ophthalmological Society, 284 Clark, R. Lee, Jr., and Cumley, Russell W.: The Book of Health, 450 Dolltus, Mare Adrien, and Auvert, Bertranne: Glioma

of Health, 450

Dollfus, Marc Adrien, and Auvert, Bertranne: Glioma of the Retina and Pseudoglioma, 411

Elwyn, Herman: Diseases of the Retina, 500

Fialho, Sylvio Abreu: Toxoplasmose Ocular, 447

Fishbein, Morris: 1934 Medical Progress, 565

Haessler, F. Herbert: Ophthalmologic Diagnosis, 446

Jaensch, P. A.: Introduction to Ophthalmology, 129

Jean-Gallols: Therapeutiques vasculaires en Ophtalmologie, 565

Knüsel, Otto: The Floating Contact Lens, 500

Jean-Galiois: Interapeutiques vasculaires en Ophtal-mologie, 985
Knüsel, Otto: The Floating Contact Lens, 506
Köhler, Alban: Grenzen des Normalen und Anfänge des Pathologischen im Röntgenbilde des Skelettes,

Linksz, Arthur: Physiology of the Eye, 2007 Nurnberger, John I., and Korey, Saul R.: Pituitary Chromophobe Adenomas: Neurology, Metabolism, Therapy, 2009 Perera, Charles A.: May's Manual of the Diseases of the Eye, 2009.

the Eye, 600 A.: May's Manual of the Diseases of Vernon, M. D.: A Further Study of Visual Perception, 943 Weinstein, Paul: Glaucoma: Pathology and Therapy,

Boxers, eye symptoms of, 978
Boxers, eye injuries in, 837
Brachycephaly, 345
BRAIN: pseudotumor of, 833
tumors of, 633, 634
ophthalmodynamometry in, 630

BRUCELLOSIS: complications of, 118 eye manifestations of, 320 Bruch's membrane, pathology of, 152 Buerger's disease, eye changes in, 640 Buphthalmos, in four brothers, 641

C

Calsulfhydryl, evaluation in corneal wounds, 969 See also Hydrosulphosol® Campimetry, in dark, 471 Canal of Schlemm: See Schlemm's canal Carbon monoxide, retrobulbar neuritis due to (experimental), 307 CARCINOMA: bilateral metastatic, 944 of choroid, metastatic, 673 of eyelids, 270, 836 of limbus, 151 of meibomian gland, 259 of uvea, 204 Carotid, injections of curare, 133 cavernous fistula, 262, 319 Carrier state, genetic, detection in ophthalmic pathology, 841 Castration, effect on ocular tension, 296 CATARACT: allergenic extracts to treat, 621 alloxan, 159 biochemical study of, 459 amino acids to treat, 621 congenital, central, 975 dislocation of Soemmerring's ring, 828 dithizone, biochemical study of, 459 epithelial downgrowth after, 268 EXTRACTION: anterior chamber reformation after, ocular tension and, 297 complications after, pathologic documentation of, 672 expulsive hemorrhage after, 623 in diabetes, 829 in primary glaucoma, 296 instrument for, 941 INTRACAPSULAR: 623 hyaloid membrane rupture after, 657 influence hypotension on, 157 macular edema after, 643 suction cup for, 145 transportation patient after, 816 uveitis after, 949 fish-lens extracts in, 829 galactose, 792 glaucoma complicated by, 157 idiopathic hypoparathyroidism and, 622 in alloxan diabetes, 795 lens exfoliation and, 1 morgagnian, phakogenetic ophthalmia with, 615 neurodermatitis and, 829 operations: absorbable sutures in, 828 causes of failure in, & for secondary, 975 incision in, new technique, 905 radiation, 828 experimental, 828 fast neutrons producing, 829 secondary, operation for, 975 surgery, curare in, 297 traumatic, and iridocyclitis, 121 treatment without operation, 622 vitamin-C, decomposition in, 463 deficiency in, 465 Caterpillar, ophthalmia due to, 153 Cavernous sinus, radiographic study of, 608 Cerebral angiography, 55 Cerebral tumors, 633 Chemotherapy, effect on eye, 460 Chicago Ophthalmological Society, 121, 787

CHILDREN: behavior of, 598

endogenous uveitis in, 613

school, visual performance in, 467

location congenital dacryostenosis in, 768

referral standards for eye examination, 710

eye injuries in, 639

proptosis in, 312

CONTACT LENSES (continued) CHILDREN (continued) sensitivity to, 291 uveitis in, 613, 822 Chloramphenicol, in pyocyaneus infections, 135 visual acuity and, 605 in rosacea keratitis, 141 Contrast perception, with glasses impervious to ultraviolet, 606 in trachoma, 970 Chloresium and lysozyme, in corneal ulcers, 445 Convergence, in Graves' disease, 641 stimulus to, 137 CORNEA: astigmatism of, due to pterygium, 609 biochemical changes in preserved, 603 cadaver, characteristics of, 608 Chlorides, concentration in aqueous, 459 concentration in blood, 459 Cholinesterase, behavior during Hydrazide therapy, 136 Chorioepithelioma, of testis, with choroid metastasis, 316 Chorioretinal diseases, lipoid extracts in, 830 conical, corneal transplantation for, 118 genetics of, 846 Chorioretinitis, embolus in, 306 partial penetrating, 612 DEGENERATION: 147 juxtapapillaris, 159 toxoplasmosis in adult, 163 genetics of, 844 CHOROID: carcinoma, metastatic, of, 873 hereditary crystalline, 971 polymorphous, 610 coagulation of, in Coats' disease, 830 coloboma of, 152, 322 function of, and primary glaucoma, 619 melanoma of, 107, 254 dehydrogenase system of, 460 disease, sulfhydryl in, 609 malignant, 973 dystrophy of, 268 progressive atrophy of, 842 Fuchs', genetics of, 848 reticulate, 149 rupture of, mechanism, 791 effect hyaluronidase on vessel formation in, 815 tumor metastases to, 316 endothelium, proliferations of, 611 epithelioma, 149 epithelium, regeneration of, 544 tumors of, 837 Choroiditis, simulating neoplasm, 122 Choroidoretinal degeneration, 843 experimental tuberculosis of, 969 Ciliary body, epinephrine in, 464 fluid, metabolism of, 456 norepinephrine in, 464 Ciliary processes, respiration of, 464 Cilioretinal arteries, 303 history of, after posterior incision, 131 hydrops of, 788 inflammation of, without leukocytes, 479 megalo-, 845 melanoblast proliferation into, 132 Clinical pathologic conferences, 107, 254, 420, 568, 774, 931 Cloquet's canal, persistence of, 160 Coats' disease, choroid coagulation in, 830 Cocaine, action on amino-oxidase of iris, 135 Collagen disease, eye complications of, 321 Coloboma, of choroid, 322 metachromasy of, after death, 458 mucoid of, 603 nerve endings in human, 451 opacities, familial congenital, 612 of eyelid, 322 Color blindness, electroretinogram in, 140 pulsation curve of, 816 Color vision, pseudo-isochromatic tables and, 138 testing of, clinical, 967 refractive power of, changes during growth, 469 rose thorn penetrating, 157 rust ring of, removal of, 152 tests for, recent, 468 sclera transplantation in, 135 Colorado Ophthalmological Society, 118 sensibility, action cortisone on, 133 Conan-Doyle, Sir Arthur, 799
CONGENITAL ANOMALIES: Bonnevie-Ullrich synsensitivity to contact lenses, 291 spaces in, in glaucoma, 155 drome, 322 structure of, polarized light study of, 451 changing attitude toward, 321 Claude-Bernard-Horner syndrome, 322 survival of preserved, 821 dyscephaly, hypotrichosis, and cataract, 322 swelling of, action cortisone on, 288 thickness, application to corneal transplantation, 143 ulcers, chloresium, lysozyme and, 445 hypopyon, due to B. pyocyaneus, 971 facial diplegia, 309 See also under names of various organs and regions CONJUNCTIVA: amyloid tumor of, 148 blood vessels of, change with eyeball compression, 969 bulbar, mucinous cells of, 130 polymyxin-B injections in, 480 nicotinic acid in healing, 764 VASCULARIZATION: action cortisone on, 288, 465 vascular beds in, 812 cytology of, 576 experimental, 461 mechanism of, 454 dermolipoma of, and mandibulofacial dysostosis, 354 epithelioma of, 149 WOUNDS: autoplasm in, 480 follicular hyperplasia of, 479 calsulfhydryl in, 970 injuries of, autoplasm in, 150 cat-claw, 319 internal gaping, 291 papillomatosis of, 589 sex hormones in healing, 456
CORNEAL TRANSPLANTATION: biochemical changes pigmented tumors of, 151 primary sensitization of, 132 in preserved cornea, 603 corneal thickness and, 143 sarcoid of, 971 sensitivity to contact lens, 291 tolerance to erythromycin, 291 donor cornea changes during storage, 290 for conical cornea, 118 tophi, gout and, 292 partial penetrating, 612 trachoma-virus cultivation in, 454 for limbal dermoids, 149 tuberculosis of, 292 graft, fixation and astigmatism, 290 primary of, 479 tumors of, 316 instrument to cut lamellar, 969 vascularization of, after leukomas, 148 vascular bed of, in menstruation, 610 CONJUNCTIVITIS: and trachoma in Egypt, 150 antibiotics in diplobacillar, 290 radiation therapy in, 150 histochemical study of cornea in, 820 indications and contraindications, 971 experimental regression of a, 150 Parinaud's and cat-scratch disease, 613 law to bequeath eyes, 642 metachromasy in host cornea, 458 vernal, beta radiation in, 289 blood-aqueous barrier in, 604 penetrating, 288 CONTACT LENSES: in aphakia, monocular, 139 molded corneal caps, 467 perforating, instrument for, 285 technique of, 973 preparation eye and patient for, 972 photophobia and, 605

CORNEAL TRANSPLANTATION (continued) preplaced sutures in, 111 present status of, 148 preservation cornea for, 972 scleroplasty and, to treat ocular tumors, 970 storage of eyes for, 969 transportation of eyes for, 969 trephine for, 969 CORRESPONDENCE: acute ocular lime burns, 962 articles on child behavior, 596 illumination and, 966 chloresium and lysozyme in healing torpid corneal ulcers, 46 vitamin A and, 464 Graefe, Alfred, and Albrecht von, 598 gumma of orbit, 127 standard visual acuity chart, 803 surgical correction of myopia, 200 Corticoid, in aqueous, 135 CORTISONE: 471, 472, 473, 408, 467, 821 action, on corneal sensibility, 133 in anisopia, 98 on corneal swelling, 288 on corneal vascularization, 288 and, 611 on lacrimal lysozyme, 135 Devie's disease, 309 on ocular tension, 133 on pupil, 133 antiallergic action of, 602 concentration, in aqueous, 134 in vitreous, 134 effect on eye, experimental study of, 923 eye changes after (rats), 602 herpes and, 133 hydro-: See Hydrocortisone pathogenesis, 305 problem of, 299 in allergy, 462 in angioneurotic edema, 310 in chemical injuries, 239, 269 testosterone in, 320 therapy of, 624 in lime burns, 200 in neuroretinitis, 306 treatment of, 300 vitamin E in, 581 in sarcoidosis, 306 Diagnostic kit, 117 in scleromalacia perforans, 288 in Sjøgren's syndrome, 472 in tuberculosis, 473 influence on corneal vascularization, 465 injections into anterior chamber, 137 passage into, aqueous, 134 into vitreous, 134 postoperative use of, 288 value in eye disease, 286
Craniofacial dysostosis (Crouzon's disease), 387
Craniostenoses, 339, 360
Cross cylinders, simplified calculations for, 469
Crouzon's disease, 387 Crystals, in anterior segment, 456 Cul-de-sae, antibiotic retention in, 454 EDITORIALS: CURARE: action of carotid injections of, 133 action on pupil, 41 effect on eye at rest, 147 meeting, 596 in cataract surgery, 297 influence on ocular tension after electroshock, 459
Cyclodialysis, trephination vs., in glaucoma, 296
Cyclodiathermy, in glaucoma, 592
mode of action, 157 801 Cycloelectrolysis, in glaucoma, 592 Pisces vobiscum, 277 Cyclogellary body, 620 Cyclogyl, for cyloplegia, 948 Cycloplegia, new drugs for, 946 Cycloplegic, single instillation of, 940 CYSTS: hydatid of orbit, 639 of anterior chamber, 153 epilepsy, 976 of eyeball, echinococcus, 640 of iris, 153, 256 in glaucoma, 619 intra-epithelial, after DFP, 327 pigment nodules, after miotics, 856 of orbit, dermoid, 311 of selera, posttraumatic, 149 of vitreous, 830

Dacryoadenitis, due to impacted tooth, 835 Dacryocystitis, lacrimal-sac aspiration in, 835

tuberculous, dacryocystorhinostomy in, 635 Dacryocystorhinostomy, drainage protector in, 314 electrocoagulation in, 978 in tuberculous dacryocystitis, 635 Zarzychi's technique, 313 Dacryostenosis, congenital, location in children, 763 DARK ADAPTATION: chemical factors in, 469 electrical phosphene and, 140 electrical response during, 966 nervous factors in, 469 Demyelinating diseases, optic neuritis and, 487 Depth perception, acquisition of, 468 anomalous, due to unequal image brightness, 468 in anisodominance, 98 Dermoids, corneal transplantation for limbal, 149 Dermolipoma, of conjunctiva and mandibulofacial dysos-tosis, 354 Descemet's membrane, corneal endothelial proliferation DFP, intra-epithelial cysts of iris after, 327, 836 DIABETES: alloxan, cataract in, 795 cataract extraction in, 829 mellitus, eye complications of, 979, 980 genetics of, 852 DIABETIC RETINOPATHY: 830, 953 alpha tocopherol in, 581 Kimmelstiel-Wilson disease and, 628 Diamox, ocular tension decrease after, 13 Diathermy, pupil changes after, 307 Dibenamine, study of, 293 Diplopia, Lancaster test for, variations of, 476 Dominance, visual agnosia and alternating, 631 Drugs, passage of, 557 Drusen, of optic nerve, 790 Dyscephaly, hypotrichosis, and cataract, 322 Dysostosis, mandibulofacial, and dermolipoma, 354

Ectropion, free skin grafts in cicatricial, 636 surgical correction of, 636 An oculist without a patient, 799 Chicago clinical conference and Midwest research German ophthalmology, 124
Medical ethics and philosophy involved in dispensing glasses by ophthalmologists, 439 Numbered International Congresses of Ophthalmology, Totalitaristic tissue therapy, 960 Ehlers-Danlos syndrome, 850 Electrocoagulation, in dacryocystorhinostomy, 978 in tuberculous periphlebitis, 626 Electroencephalogram, flicker fusion and, in diagnosing to examine visual fields, 631 to study response to retinal stimulation, 632 Electro-oculogram, in strabismus, 145 Electrophoresis, to study aqueous, 463 to study Pm (radioactive phosphorus), 463 ELECTRORETINOGRAM: flicker, study of, 138 in color blindness, 140 in hemeralopia, 133 in uveitis, 292 to study response to retinal stimulation, 632

Electroshock, glaucoma and, \$57, 859 ocular tension changes in, 296 Electrotherapy, in macular degeneration, 302 Encephalomyelitis, neuromyelitis optica and, 308 Endodiathermy, to seal macular holes, 649 Endophthalmitis, postoperative, 897 Enucleation, socket formation after, 635 Enzymes, fibrolytic in retinal vein thrombosis, 305 Epilepsy, flicker fusion to diagnose, 976 Epibulbar tumors, 637 Epinephrine, in aqueous, 464 in ciliary body, 464 in iris, 464 Epiphora, nasolacrimal intubation in, 635 Epithelial downgrowth, 268 EPITHELIOMA: of conjunctiva, 149 of cornea, 149 of eyelids, 426 Erisophake, new tubing for, 285 Erythema multiforme, hypopyon and, 152 Erythromycin, conjunctival tolerance to, 291 in trachoma, 291 new ointment with, 938 Erythropsia, 617 Eserine, influence on ocular tension after electroshock, 859 Ethmoid, tumor of, exophthalmos due to, 317 Evisceration, malignant melanoma after, 315 EXOPHTHALMOS: due to granulomatosis, 321 due to ethmoid sarcoma, 317 endocrine, optic-nerve lesions of, 628 in Graves' disease, 635 in Hand-Schüller-Christian disease, 834 malignant, 118 orbital tissues in, 834 orbitonometry in, 520 pulsating, pathologic physiology of, 308 thyroid dysfunction and, 123 EYE: age and, histochemical study of, 136 diseases, audiometric examination in some, 470 influence allergy on, 601 dominance, 467 dressing tray, 943 emergencies, 817 examinations, monochromatic light in, 143, 144 hospitals, for tuberculosis, 142 of Monotreme, 452 physiologic chemistry of, 464 retraction syndrome, 478
Eyeball, contusion of, pupil in, 976
echinococcus cyst of, 640 Eyebrows, abscess of, in twins, 642 absence of, repair, 835 EYELIDS: baggy, repair of, 113 carcinoma of, 270 diagnosis and therapy, 836 coloboma of, 322 corrective surgery of, 312 cpithelial tumor of, 835 epithelioma of, 426 eversion of upper, congenital, 779 granulomatosis of, 321 hemangiomas of adnexa and, 317 margin, removing lesions from, 314 melanoma of, 122 repair of, deformed lower, 591 replacement of full thickness, 313 retraction in Graves' disease, 314 tumor of, 316

Fatigue, visual, 606
Fisostina, a new cholinergic drug for glaucoma, 974
FLICKER-FUSION: auditory stimuli and, 137
binocular, a study of, 968
in electroencephalographic diagnosis of epilepsy, 976
to study light perception of retina, 139
to study vegetative regulation light sense, 140
Flicker stimulation, in amblyopia, 138
Fluorescein, in diagnosis of ocular tumors, 318
permeability test, 823

FOREIGN BODIES: copper wire, 787 corneal rust ring after, removal of, 152 gonioscopy in, 285 in lacrimal sac, 977 intraocular, 318 localization, 969 Grzedzielski's, 475 radiologic, 474 Fovea, sensitivity of, changes in, 966 shagreen, entoptic phenomenon of, 605 FUNDUS: changes, in arteriosclerosis, 160 in macroglobulinemias, 159 in senile hypertension, 160 in syphilis, 144 in tuberculosis of skin, 627 in tuberculous meningitis, 292 developing, retrolental fibroplasia and, 625 examination, methods of, 474 in tuberculous meningitis, 215 perivascular tissue of, in diagnosis, 160 Fungus, infections of eye, 813 Fusion, central and peripheral, 816 paramacular and peripheral, 478

Galactose cataract, 792 Ganglioplegics, in ophthalmology, 455 Genetics, clinical detection carrier state in ophthalmic pathology, 841 of albinism, 982 GLAUCOMA: 621 a review, 974 anterior-chamber depth changes in, 339 aqueous outflow in, 618 capsulocuticulare, and lens exfoliation, 1 cataract complicating, 157 CHRONIC: miotic therapy in, 155 ophthalmotonic arrhythmia in, 974 congenital, persistence mesodermal tissue in, 617 corneal spaces in eyes with, 155 cyclodialysis in: See Cyclodialysis cyclodiathermy in: See Cyclodiathermy detection in general practice, Diamox to lower tension in, 13 differential diagnosis in, 621 electroencephalography in, 619 electroshock therapy and, 857, 859 genetics of, 847 gonioscopy in: See Gonioscopy hemorrhagic, vasodilators in, 401 importance tonometry in, 826 induced by air injections, 424 medical treatment, Fisostina in, 974 tetra-ethyl ammonium bromide in, 974 miotics in narrow-angle, 347 monocular after atropine, 826 narrow-angle, iridectomy in, 504 mechanism of, 332 miotics in, 347 open-angle, 275 operations, biochemical study of, 154 cyclodialysis vs. trephination, 291 mechanism of Elliot's trephining, 619 scleral trephination, 616 pathogenesis, 155 preglaucoma, 154 premonitary symptoms, 184
PRIMARY: and function of choroid, 619
aqueous solutions for, 291, 587, 744 cataract extraction in, 2% etiology of, 827 neurovascular considerations, 294 optic atrophy of, 294 pathogenesis and classification, 724 psychiatry of, 293 uveal circulation and, 154 reoperation in, 119

secondary, due to lens capsule rupture, 158

spontaneous cure in, 296

PRIMARY (continued) stellate-ganglion block in, 295, 826 surgical treatment, 296 tests for, amyl nitrite, 825 dark room-water drinking, 619 provocative, 616, 618 after surgery, 155 transient, with meningeal hydrops, 826 treatment, vitamin-D, 618 visual field defects in, 616, 793 See also under Ocular Tension Glaucomatocyclitic crises, 267 Glioma, of the optic nerve, Recklinghausen's disease and, Globe, luxation of, voluntary, 351 Glutathione, of lens, 603 formalin and, 457 Glycogen, in retina, 465 Gonioscopy, in eye injuries, 157 in foreign bodies of chamber angle, 285 in retinitis pigmentosa, 302 prism for, 115 Gout, conjunctival tophi and, 292 genetics of, 548
Graefe, Alfred and Albrecht von, 598
Granuloma, of orbit, 571
Granulomatosis, lipoid, 321 Graves' disease, 640 convergence insufficiency in, 641 eyelid retraction in, 314 orbital signs in, 635 GT-75, GT-92, GT-93, for cycloplegia, 948 Gumma, of orbit, 127

Hand-Schüller-Christian disease, exophthalmos in, 834 Harada's syndrome, keto-enol substances in urine in, 822 Headache, migraine and tension, 951 retinal circulation in, 641 Hemangiomas, of eyelids and adnexa, 317 retrolental fibroplasia and, 315 Hemeralopia, electroretinogram in, 133 Hemianopsia, binasal, 632 Hemochromatosis, eye findings in, 640 HEMORRHAGE: in peripheral iridectomy, cause of, \$89 meningeal, 634 of macula, 625 retinal, in blast injuries, 302 HERPES: antihistamines and, 133 blood-aqueous barrier behavior in, 604 cortisone and, 133 zoster, retrobulbar neuritis after, 629 Heterochromia, of iris, congenital, 292 Heterophoria, aniseikonia and, 1878.
Heterophoria, aniseikonia and, 1878.
Homatropine, and ocular hypertension, 619
Hormones, influence on ocular inflammation, 454
sex, in healing corneal wounds, 456 therapy with, 817 androgen steroids in hypophyseal adenoma, 629 Horopter, oscillation to determine true, 137 Horses, periodic ophthalmia in, 243 Hyaloid membrane, rupture after cataract extraction, 657 Hyaluronidase, 608, 818 effect on corneal vessel formation, 815 Hydrazide of isonicotinic acid, cholinesterase behavior during therapy with, 136 in experimental tuberculosis, 457 Hydrocortisone, 462, 533 Hydrosulphosol®, experimental evaluation, 239 in lime burns, 209 in regeneration corneal epithelium, 544 See also Calsulfhydryl Hypercholesteremia, 851 Hypermetropia, dioptric center in, 968 Hypertelorism, 347 HYPERTENSION: arterial, eye complications of, 960 essential, genetics of, 847 cranial angiosclerosis and, 320 senile, fundus changes in, 160

Hyphema, air injections in traumatic, 409 effect streptokinase on, 911 Hypoparathyroidism, idiopathic and cataract, 622 Hypophysis, tumor of, differential diagnosis, 309 Hypopyon, erythema multiforme and, 152 Illumination, dark adaptation and, 966 for reading, 816 influence on accommodation, 470 Image, unequal brightness of, 468 IMPLANTS: 635 Ridley: See Ridley intraocular lens scleral, 311 Industry, visual aptitudes in, 323 Infants, anesthesia (general) in, 141 blindness in, 642 lacrimal-sac infections in, 637 INFECTIONS: focal, differential diagnosis in, 143 gram-negative, diagnosis and therapy, 288 mycotic, 813 pyoeyaneus, chloramphenicol in, 135 streptococcic, serologic reactions in, 454 Inflammation of eye, influence hormones on, 454 INJURIES: acute, initial treatment, 318 burns, Lambral in, 638 CHÉMICAL: cortisone in, 239, 269 Corvasymtom and conjunctival undermining in lime, 318 due to silicon ester, 461 lime, 962 management of, 209, 318 potassium permanganate, 610 foreign body: See Foreign Bodies gonioscopy in eye, 157 head, eye complications of, 319 in adults, 639 in boxers, 837 in children, 639 indelible pencil, 978 lens, 120 of serious import, 318 orbitocranial penetrating, 750 penetrating, 318 rose thorn, 157 war, repairing sockets after, 634 INSTRUMENTS: a new tonometer, 142 diagnostic kit, 117 eye-dressing tray, 943 for cataract extraction, 941 for corneal repair, 428 for corneoscleral suturing, 428 for cutting lamellar corneal grafts, 969 for perforating corneal transplantation, 285 for plastic operations, 286 for vitreous surgery, 305 gonioscopy prism, 115 intracavitary radon applicator, 143 lens forceps, 111 optical control of sharp ophthalmic, 471 perimeter attachment, 261 restraining device for small animals, 470 swivel instrument table, 475 table viewer for clinical demonstrations, 471 tables for, 474 to measure speed of visual perception, 144 trays for, 474 trephine for corneal transplantation, 969
International Council of Ophthalmology, 445
International Congress of Ophthalmology, numbered, 801
seventeenth, 126, 220, 444, 538 Intracranial tumors, 632 diagnosis in, 633 prognosis in, 633 Intraocular acrylic lens: See Ridley intraocular lens Iodine, absorption into anterior chamber, 458 Irgapyrine, in irritative diseases, 457 IRIDECTOMY: action of, 296

in narrow-angle glaucoma, 504

IRIDECTOMY (continued) peripheral, 8 Iridencleisis, 618 cysts of anterior chamber after, 153 Iridocorneal angle, prism to examine, 470 IRIDOCYCLITIS: allergic aspects of, 614 and traumatic cataract, 121 Still's disease and, 616 surgical therapy of, 823 vitreous alterations with, 623 vitreous changes in, 158 IRIS: action cocaine on amino-oxidase of, 135 aplasia of, 613 atrophy of, progressive and essential, 614 cysts of, after DFP, 327, 886 intra-epithelial, 327 spontaneous epithelial, 153 effect physostigmine on sphincter of, 462 effect pilocarpine on sphincter of, 462 epinephrine in, 464 essential atrophy of, 219
heterochromia of, congenital, 292 in anterior chamber, 152 leiomyoma of, 293 melanosarcoma of, 781 norepinephrine in, 464 pigment nodules of, complicating miotic therapy, 886 sympathetic innervation of, 813 tissue proliferation of, 614 tumors of, 315 Iritis, luctic allergic, 616 Isoniazid: See Hydrazide of isonicotinic acid

1

Jackson Memorial Lecture: 841

Keloids, treatment of, 472 KERATITIS: disciform, retrobulbar neuritis and, 148

herpetic, placenta in, 612 interstitial, retrocorneal hyaline bands in, 612 marginal, vitamin B₂ in, 287 nummularis, clinical picture in, 611 rosacea, chloramphenicol in, 141 sinusitis as focus infection in, 311 superficial punctate, 819 surgery of, 609 KERATOCONJUNCTIVITIS: due to hydrogen sulfide, epidemic, 822 symptomatology, 289 phlyctenular, privine-cibazol in, 611 rhodanates in, 611 sieca, rheumatoid arthritis and, 640 See also Sjøgren's syndrome Keratoconus: See Cornea, conical Keratoglobus: See Cornea, megalocornea Keratoplasty: See Corneal Transplantation Kimmelstiel-Wilson disease, diabetic retinopathy and, 628 Kirby, Daniel B., 443

L LACRIMAL APPARATUS: canal: dacryocystorhinostomy: See Dacryocystorhinostomy polyethylene tube in, 312 Veillonella parvula infection of, 313 canaliculi, obstruction of, 268 repair with hypodermic-needle stylet wires, 936 duct, intubation for epiphora, 635 gland, and lymphoglandular system, 636 tumor of, 314, 638 sac, aspiration in dacryocystitis, 835 foreign body in, 977 infection, in infants, 637 surgery of, 593 treatment disorders of, 315 Lacrimal intubation, 977 Lacrimal secretior, excess of, nomenclature of, 641

Lambral, in ocular burns, 638 Latin Ophthalmological Society, 594 Laurence-Moon-Bardet-Biedl syndrome, 846 LENS: action accommodation on, 139 amino-acid content of, after radiation, 602 capsule rupture, glaucoma and, 158 extoliation of, 1 extracts of fish, 828 freezing point of calf, 602 glutathione of, 603 formalin and, 457 mercurization of, 622 motility in aged, 605 opacities, due to asphyxia, 602 pseudo-exfoliation of capsule, 1 refraction tree, 285 specific gravity changes in growing, 812 traumatisms of, 120 Leukemia, orbital pseudotumor in, 833 retinopathy of, 303 Leukoma, graft vascularization after inflammatory, 148 LIGHT: monochromatic in eye examination, 143, 144 retinal response to, 459 Light adaptation, electrical phosphene and, 140 Light perception, retinal, flicker fusion to study, 139 Limbus, carcinoma of, 151 tumor of, 837 Lindau-von Hippel disease, 300 Lipoid extracts, in chorioretinal diseases, 830 Lobotomy, neuro-ophthalmic symptoms in, 630 Loffler's syndrome, eye manifestations of, 981 Lysozyme and chloresium, in corneal ulcers, 445

Macroglobulinemias, fundus changes in, 159 MACULA: changes, complicating coloboma choroid and disc, 152 degeneration, disciform, 830 electrotherapy in, 302 diseases, earliest symptoms of, 298 edema of, after cataract extraction, 665 endodiathermy to seal holes of, 649 hemorrhages of, 625 in exudative retinitis, 304 perforation of, traumatic, 638 Madrid Ophthalmological Society, 436, 791 Malformations, cerebral angiomatous, 309 See also Congenital Anomalies Mandibulofacial dysostosis, 322, 852 dermolipoma of conjunctiva and, 354 Marcus Gunn syndrome, 119 Marfan's syndrome, 850 Meibomian gland, carcinoma of, 259 Melanoblast, proliferation into cornea, 132 MELANOMA: malignant, after evisceration, 315 of choroid, 107 malignant, 254, 973 of eyelid, 122 of uvea, differentiation of, 318 Memphia Society of Ophthalmology and Otolaryngology, Menstruation, vascular bed of conjunctiva in, 610 Mercurialentis, 622 Methanol, poisoning, 629

Methyl alcohol: See Methanol
Microphthalmos, in prenatal toxoplasmosis, 976
Microscope, retinal pigment examination with electron,
130
vitreous examination with electron, 130
zonule fiber examination with phase-contrast, 130
Migraine, and tension headaches, 951
retinal circulation in, 641

MIOTICS: comparison of, 132 in chronic glaucoma, 155 in narrow-angle glaucoma, 347 pharmacology of, 391 physostin, action of, 135 stability of, 557 therapy, iris pigment nodules co

therapy, iris pigment nodules complicating, 886 See also under Glaucoma

Mocbius, sign of in Graves' disease, 641 syndrome, 309 Monotreme, eye of, 452 Motor vehicle driver, visual perceptions of, 140 Movements of eye: cover test in, 608 ocular motor apraxia, 476 photographic registration of, 146 small voluntary, 816 Mucoceles, symptoms of, 310 Mucoid, of cornea, histochemical study of, 663 MULTIPLE SCLEROSIS: optic neuritis in, 467 optic neuropathy in, 976 periphiebitis retinae in, 631 retrobulbar neuritis and, 467, 404 Mumps, ocular complications of, 320 Muscles of eye: in Wernicke's disease, 431 paralysis, diagnosis of, 818 of lateral rectus, 970 surgery, factors in failure of, 121 of superior oblique, 548 torticollis in disturbances of, 817 See also under Strabismus Mydriatics, study of Avagal, 134 Myeloma, of orbit, 316 MYOPIA: dioptric center in, 968 high, surgical tecreton of, 220 Myotonia dystrophica, 251

Nasociliary neuritis, 833
Nasociliary neuritis, 833
Nasolacrimal canal, radiography of, 836
Nasopharyngeal fibroma, 630
Nembutal sedation, 817
Nephropathy, retinal vein thrombosis in, 302
Nephrosis, retinal vessels in, 304
Nerves, abducens paralysis, 322
endings of, in human cornea, 451
Nervous cumponent, of visual adaptation, 966
Neurodermatitis, cataract and, 829
Neurofibromatosis, optic-disc tumor and, 629
uveal sarcoma and, 974
Neurology, ophthalmic contributions to, 631
Neuromyelitis optica, in encephalomyelitis, 308
Neuro-ophthalmology, a review, 832
New England Ophthalmological Society, 431, 592, 953
New Guinea, ophthalmic conditions in, 258
New York Society of Clinical Ophthalmology, 271, 386, 948
Newborn, orbital sarcoma of, 310

Newborn, orbital sarcoma of, 310
News Items, 164, 324, 465, 647, 828, 94
Nicotinic acid, in healing corneal ulcers, 764
Night vision, radium adaptometer to examine, 138
Nitrocellulose poisoning, 639
Noradrenaline, in ophthalmology, 814
Norepinephrine, in aqueous, 464
in ciliary body, 464
in ciliary body, 464
in iris, 464
NYSTAGMUS: congenital, electronystagmography in, 476
disturbances central co-ordination and, 147
miners', 287
optokinetic, physiology of, 308,
to determine visual acuity, 817
retraction, 177
strabismus and, 146
visual defects due to fixation, 271

0

Obituaries:
Kirby, Daniel B., 443
Wolff, Eugene, 882
Ocular ocronosis, alkaptonuria, osteoarthritis and, 979
OCULAR TENSION: action cortisone on, 133
action thyrotropic hormone on, 619
anterior chamber reformation and, 297
changes in uveitis, 630
compounds lowering, 617
daily changes in, 621

OCULAR TENSION (continued) effect stellate ganglion block on, 826 Diamox to lower, 13 dibenamine, effect on, 293 distribution of normal, 296 effect of eastration on, 296 effect of stellate ganglion block on daily variations of, electroshock, and changes in, 296, 857, 859 hypotony, due to reduced aqueous flow, 620 influence on cataract extraction, 157 increased, experimental in rabbit, 975 homatropine and, 619 reflex changes in, after massage, 155 variations, in chronic glaucoma, 974 venous pressure and, 157 See also under Glaucoma Ointment, erythromycin, 938 menstruum for, 460 Onchocerosis, 979, 981 Operations, lamellar sclerectomy, indications for, 304 subconjunctival air injections in fistulizing, 619 OPHTHALMIA: neonatorum, prophylaxis, 148 nodosa, 153 periodic, in horses, 243 purulent, campaign against, 983 aympathetic: See Sympathetic Ophthalmia Ophthalmic, biochemistry, 134 stress, 639 Ophthalmodynamometry, in brain tumors, 630
Ophthalmodynamometry, in brain tumors, 630
Ophthalmology, in Union of South Africa, 411
radioactive isotopes in, 141
Ophthalmoplegia, chronic progressive external, 477 congenital, 844 external, 832 progressive, 818 Ophthalmoscopy, direct, magnification attainable by, 470 OPTIC DISC: choked, diagnosis in, 307 coloboma of, 152 craterlike hofe in, 307 in pituitary tumor, 600 tumor of, with neurofibromatosis, 629 OPTIC NERVE: aplasia of, 496 ATROPHY: in Recklinghausen's disease, 36 in tuberculous meningitis, 506 of primary glaucoma, 294 pituitary and vitamin B₁ in, 831 visual defects due to, 271 blood supply of, 451 damage to, from pressure, 601 drusen of, 790 glioma of, and Reckinghausen's disease, 15 in multiple sclerosis, 457 lesions of, in endocrine exophthalmos, 628 retinal trigger mechanism and, 464 OPTIC NEURITIS: 831 clinical aspects of, 273 demyelinating diseases and, 46 pathologic studies of, 272 retrobulbar: See Retrobulbar Neuritis visual field, changes in, 975 defects in, 273 Optic neuro-encephalomyelopathy, 309 Optic neuropathy, in multiple sclerosis, 976 Optic tract, medial root of, 813 ORBIT: a review, 310 cholesteatoma of, 834 cysts of, dermoid, 311 hydatid, 639 granuloma of, 571 gumma of, 127 myeloma of, 316

neoplasm of, 637 penetrating injuries of, 758

plastic surgery of, 311 pseudotumor of, 310, 311 in leukemia, 833

ORBIT (continued) radiologic study external border of, 144 reconstruction, polyvinyl sponge in, 977 sarcoma of, in newborn, 310 tissues of, in exophthalmos, 834 tumors of, 315, 316 double primary, 837 malignant, 637 transcranial, removal, 310 venous circle of, radiographic study, 608 Orbitonometry, clinical use of, 520 Orthoptics, graphic method in, 466 in strabismus, 466 new methods of, 967 teletrainer for, 474
Osteopetrosis, differential diagnosis of, 321
Oxycephaly, 382 Oxygen, in retrolental fibroplasia: See Retrolental Fibroplasia

Papilledema, 632 in syphilis, 307
Papilloma, of conjunctiva, 589
Papua, ophthalmic conditions in, 288 Paramyeloidosis, eye in, 148 Parturition, amaurosis during, 586 Patergica Zeissitis, 315 Pemphigus, 147 vulgaris, eye signs in, 978 Penicillin, Staph. resistant to, 453 Perimeter, attachment for projection, 261 slot, hand, 473 Perimeters, comparison Maggiore and Goldman, 138 Perimetry, to diagnosis pituitary lesions, 308 with ultraviolet light, 142 Periphlebitis retinae, in multiple selerosis, 631 Periseleritis, anterior suppurating, 160 Phakogenetic reaction of human eye, 622 Pharmacology and toxicology: a review, 814 Phase-contrast study, of vitreous, 452 of normal, 131 of zonular fibers, 130 Philadelphia, College of Physicians, Section of Ophthalmology, 275, 792, 944 Phlyetenulosis, differential diagnosis, 479 Photochemical component, of visual adaptation, 966 PHOTOGRAPHY: biomicro-, stereoscopic, 607 camera for einephotomicrography, 470 color, of retina, 471 three-D, 144 to register eye movements, 146 Photophobia, contact lenses and, 605 Physiologic chemistry, of eye, 464 Physostigmine, effect on iris sphincter, 462 Physostin, a new miotic, 135 Pilocarpine, effect on iris sphincter, 462 Pituitary, extract and vitamin B1 in optic-nerve atrophy, lesions of, perimetry and angiography to diagnosis, 308 tumors of, 309 optics discs in, 800 visual field changes in, 630, 880 Placenta, in herpetic keratitis, 612 Plagiocephaly, 367 PLASTIC SURGERY: disc-knife for, 286 in alopecia, 835 in ectropion, 636 of deformed eyelid, 591 of eye socket, 311

after war injuries, 634 split-skin homograft in symblepharon, 611 to repair baggy eyelids, 113 Pneumoencephalography, retinal artery pressure in, 142 Poliomyelitis, eye disturbances in, 832 Polymyxins, in pyocyaneus infections, 610 B: in pyocyaneus ulcer, 538 subconjunctival injections of, in corneal ulcer, 480 E: in pyocyaneus infections, 479

Pons, tumors of, 309 Posterior segment, crystals in, 625 Potassium permanganate, injuries due to, 610 Preglaucoma, 154 Pregnancy, amaurosis in, 307 Presbyopia, optogeometries in spectacles for, 467 Prisms, simplified calculations for, 469 to examine iridocorneal angle, 470 Privine-cibazol, in phlyctenular keratoconjunctivitis, 611 PROPTOSIS: in children, 312 Prostheses, 607, 635 plastic and/or glass, 968 Protective devices, visual impairment by, 642 Proteins, of aqueous, electrophoretic study of, 463 of vitreous, studies of, 456 Pseudomonas aeruginosa, chloramphenicol in infections polymyxins in infections of, 610 B: 538 in corneal ulcer, 480 E: 479 ulcer due to, 538 See also B. pyocyaneus Psoriasis, vascular abnormalities at limbus in, 480 Psychiatry, of primary glaucoma, 293
Psychotic patient, management of for eye surgery, 854
PTERYGIUM: corneal astigmatism due to, 609 operation for, 903 prophylaxis of, 609 surgery of, 609 treatment of, 609 PTOSIS: 636 crutch in, comments on, 978 myogenic familial, 118 operation for, 529 surgery of, 835 Pulseless disease, 784, 788 PUPIL: action cortisone on, 133 action curare on, 41 artificial, vision restored by, 403 block, and narrow-angle glaucoma, 332 . changes, after diathermy, 307 dilatator of, 452 in contusion of eyeball, 976 miotic-resistant, mechanism of, 828 reactions, change with age, 832 Pupillomotor photoreceptors, directional sensitivity of Purine, exchange in vernal catarrh, 612 Pyrazolán, derivates in eye therapy, 606

Polyvinyl sponge, in orbital reconstruction, 977

Radiation, amino-acid content lens after, 602 alpha, 183 beta, in vernal conjunctivitis, 289 using strontium-90 applicator, 945 therapy, in graft vascularization, 150 of malignant lesions, 638 X-ray: See X-rays Radioactive isotopes, in ophthalmology, 141
Radioactive phosphorus (Pas), electrophoretic studies of 463 experiments with, 439 in bilateral uveal carcinoma, 207 to detect intraocular tumors, 836 uptake by intraocular neoplasms, 45 Radiographic study, of cavernous sinus, 608 of nasolacrimal canal, 836 of venous orbital circle, 608 Reading, light intensities for, 816 types, 138 Recklinghausen's disease, genetics of, 849 optic-nerve glioma, a manifestation of, 15 optic atrophy in, 36 Reiter's syndrome, 588 Refraction, changes in, due to changes in anterior-chamber depth, 469

during growth, 469 comparison results in same individuals, 666 tree, a lens, 285 RETINA: aneurysm of, 908 arterioles of, 624 ARTERY: action vasodilators on, 134 embolus, in chorioretinitis, 306 pressure, in pneumo-encephalography, 142 pulseless disease and, 784, 788 spasmolytic action on, 134 thrombosis, 578 circulation of, control of, 604 in headache, 641 in migraine, 641 problems of, 627 cone distribution in, visual acuity and, 466 degeneration, experimental pigmentary, 627 juvenile, 300 of dog, 130 pigmentary, basal metabolism in, 975 experimental, 627 DETACHMENT: bilateral, 453 endodiathermy in, 649 experimental, 158 idiopathic, 438 metabolism in, 133 metabolism of, 601 pathogenesis, 298 postoperative treatment, 298 pupil changes after diathermy for, 307 scleral resection in, 300, 612, 625 and diathermy, 624 technique of lamellar, 612 statistical study, 303 surgery, end results of, 301 systemic complications of, 582 sympathetic ophthalmia after operations for, 822 vitamin-A deficiency in, 302 diseases of, 430 electric activity of, optic nerve and, 464 flicker fusion to study light perception of, 139 flucker fusion to study light perception of, 139 fluid (subretinal), experimental production membranes folds, and persistence vitreous vessels, 626 glioma of, 159 glucose utilization of, 461 glycogen in, 465 hemorrhage of, in blast injuries, 302 histochemistry of, 461, 815 holes, endodiathermy to seal, 649 light sensitivity of, action amino acids on, 133 metabolism of, 133 of living, 455 periphlebitis of, in multiple sclerosis, 631 photography of, in color, 471 three-D, 144 pigment epithelium of, 301 examination with electron microscope, 130 tumors of, 637 response to monochromatic light, 459 car, intravenous fluorescein and Geigy blue in, 628 VEIN: pulsation, 306 thrombosis, fibrolytic enzyme to treat, 305 nephropathy and, 303 Tromexan in, 160 verrucosities of limiting membrane of, 305 vessels of, in renal disorders, 304 Retinal perspective, 642 RETINITIS: exudative, macula in, 304 neuro-, cortisone in, 306 PIGMENTOSA: ACTH in, 627 gonioscopy in, 302 vitiligo of skin and, 300 proliferans, after trauma, 791 punctata albescens, 436 Retinopathy, diabetic: See Diabetic Retinopathy of leukemia, 303

Retinoblastoma, pseudo-recurrence of, 830 Retraction syndrome, 478 RETROBULBAR NEURITIS: after herpes zoster, 629 aureomycin in, 833 disciform keratitis and, 148 due to carbon monoxide (experimental), 307 due to nitrocellulose poisoning, 639 electric excitability of eye in, 306 hypoglycemic shocks to treat, 831 in multiple sclerosis, 487, 494 sinusitis as foci infection in, 311
RETROLENTAL FIBROPLASIA: 46 case notes, 159 developing fundus in, 625 hemangioma and, 315 oxygen's role in, 299 oxygen studies in, 78 review of 46 cases, 301 Rhodanates, in phlyctenular keratoconjunctivitis, 611 Ridley intraocular lens, 158, 297, 298, 622 further report on, 623 Rosacea, 818 eye manifestations of, 819 See also under Keratitis Rose thorn, injuries of eye, 157

Saint Triduana, legend and shrine of, 982 Sanatorium, an eye, 142 Sarcoid, of conjunctiva, 971 Sarcoidosis, 131, 631 Sarcoma, of orbit, in newborn, 310 of uvea, with neurofibromatosis, 974 Scaphocephaly, 386 Scheiner, P., contributions to optics, 137 Schlemm's canal, function of, 293 Schools: See under Children SCLERA: posttraumatic cysts of, 149 in retinal detachment: See under Retina, resection, in detachment staphyloma of, 420 transplantation into cornea, 135 Sclerectomy, lamellar, indications for, 304 Scleredema adultorum, 819 Scleritis, complications of, 590 progressive posterior, 290 Scleromalacia perforans, cortisone in, 288 scleral graft in, 821 Scleroplasty, corneal transplantation and, in ocular tumor, 970 Sclerosis, multiple: See Multiple Sclerosis tuberous, 160, \$49 Scotoma, central, study of in darkness, 606 Sedation, nembutal, 817 Senile, lens motility in, 605 XVII International Congress of Ophthalmology: See International Congress of Ophthalmology Silicon ester, eye injuries from, 461 Sinus, cavernous, aneurysm of, 976 Sinusitis, in keratitis, 311 in retrobulbar neuritis, 311 in uveitis, 311 Sjøgren's syndrome, ACTH in, 472 cortisone in, 472 rheumatoid arthritis and, 640 Slitlamp, Zeiss-Opton, 143 Snake bite, blindness after, 456 Society Proceedings, 118, 267, 431, 586, 787, 944 pemmerring's ring, dislocation of, 828 SOLUTIONS: aqueous, for primary glaucoma, 391, 557, maintenance of sterile, 145 preparation of sterile, 145

preservation of, 457 Steretainer dispenser, 145 South Africa, ophthalmology in Union of, 411

Spectacles, accommodation and, effect on eye focus, 140 Torticollis, ocular, 817 bicentric lens, in anisometropia, 706 contact lenses: See Contact Lenses dispensing by ophthalmologists, 435 optogeometric considerations in, 467 Spinal fluid, comparison with aqueous, 463 for vitreous replacement, 234 Staphylococci, penicillin-resistant, 453 Status Bonnevie-Ullrich, 850 Stellate-ganglion block, in glaucoma, 295 Stereoscopic biomicrophotography, 607 Still's disease, iridocyclitis and, 616 STRABISMUS: concomitant, results in, 475 treatment of, 476, 477 divergent, 146 electro-oculogram in, 145 genetics in, 845 foveal targets to treat, 466 horizontal, vertical component of, 286 nystagmus and, 146 operations, forced position after, 287 pathogenesis, 145 treatment of, 477 orthoptics in: See Orthoptics vertical deviations, mechanism of dissociated, 146 Streptococcus vaccine, specific, in uveitis, 824 Streptokinase, effect on hyphema, 911 toxicity to anterior chamber, 911 Streptomycin, neurotoxicity of, 464 PAS and, in tuberculous periphlebitis, 626 Sulfhydryl, in corneal disease, 609 Sulfonamides, 816 absorption of, 814 Surgery of eye, management psychotic patient for, 854 nembutal sedation in, 817 Sutures, absorbable in cataract surgery, 828 Symblepharon, of trachoma, surgical treatment of, 971 split-skin homograft in, 611 SYMPATHETIC OPHTHALMIA: 823 after retinal detachment operations, 822 concept of, 822 therapy of, 822 Syndromes: Loffler's, 981 Moebius, 309 retraction, 478 van der Hoeve, 981 Werner's, 158 Syphilis, fundus changes in, 144 papilledema in, 307 Takayasu's disease (pulseless), 784, 788 Tears, action cortisone on lysozyme of, 135 pH, a study of, 313 also under Keratoconjunctivitis sicca and under Sjøgren's syndrome Temporal arteritis, eye changes in, 640 Terramycin, ointment in trachoma, 289 Testosterone, in diabetic retinopathy, 320

Takayasu's disease (pulseless), 784, 788
Tears, action cortisone on lysozyme of, 135
pH, a study of, 313
See also under Keratoconjunctivitis sicca and under Sjägren's syndrome
Temporal arteritis, eye changes in, 640
Terramycin, ointment in trachoma, 289
Testosterone, in diabetic retinopathy, 330
Tetra-ethy! ammonium bromide, in glaucoma, 974
THERAPY: advances in, 475
electro-, in macular degeneration, 302
in virus diseases, 607
of lacrimal apparatus, 315
Pyrazolon derivatives in, 606
tissue, 607, 817
in parenchymatous xerosis, 287
totalitaristic, 960
Tromexan, in retinal vein thrombosis, 160
ultrasound, 607
with products of tissue disintegration, 606
See also under names of various antibiotics and drugs
Tonography, present status of, 294
Tonometer, a new, 142
standardization of, 285
sterilization of, 475
Tonometry, "false," 468

TOXOPLASMOSIS: 320 congenital, 321 in adult chorioretinitis, 163 in adults, 639 microphthalmos in prenatal, 976 TRACHOMA: 288 anatomic-clinical therapy of, 821 and conjunctivitis, in Egypt, 150 antibiotics in, 610 aureomycin in, 465 chloramphenicol in, 970 criteria for cure in, 821 ecological techniques in, 982 erythromycin in, 291 etiology of, 149 experimental inoculation of, 819 immunity in, 151 in Fiji Islands, 291 in Greece, present status, 982 in Prodrigne, 820 in Sekukuniland, 147 in travellers, 151 in Viet-Nam, 290 map of, in Europe and Near East, 983 problems of, 289, 291 symblepharon of, surgical treatment, 971 terramycin ointment in, 289 virus of, cultivation in conjunctiva, 454 study on, 453 Trichiasis, partial, treatment of, 820 Tromexan, in retinal vein thrombosis, 160 TUBERCULOSIS: 323 cortisone in, 473 differential diagnosis in, 143 eye hospital for, 142 experimental of cornea, 969 fundus changes in skin, 627 Middlebrook-Dubos test in, 814 of conjunctiva, 292 primary, 479 streptomycin, PAS, and calciferol in, 292 Tuberculous meningitis, fundus in, 215 fundus changes in, 292 Tuberculous periphlebitis, treatment of, 626 TUMORS: angiography, in pre- and suprasellar, 55 angioma: See Angiomas biopsy (aspiration) in intraocular, 473 carcinoma: See Carcinoma cerebral, 633 corneal transplantation and scleroplasty to treat, 970 epibulbar, 637 epithelioma: See Epithelioma fluorescein, in diagnosis of ocular, 318 hemangioma: See Hemangioma in West China, 316 intraeranial, symposium on, 632 intraocular, Pm to detect, 836 uptake Pm by, 45 melanoma: See Melanoma of adnexa, 317, 837 of brain, 630, 633, 634 of choroid, 107, 254, 316, 837, 873, 973 of conjunctiva, 149, 316, 559 pigmented, 151 of cornea, 149 of ethmoid, exophthalmos due to, 317 of eye, 944 of eyelid, 122, 270, 316, 317, 426, 835, 836 of hypophysis, differential diagnosis, 309 of iris, 293, 315, 781 of lacrimal gland, 314, 638 of limbus, 151, 837 of meibomian gland, 259

of optic disc, 629 of orbit, 310, 315, 316, 571, 834, 837

malignant, 637 of pituitary, 309, 630, 680

TUMORS (continued) opthalmie diagnosis of, 286 of pons, 309 of retinal pigment epithelium, 637 of uvea, 204, 974 differentiation, 318 metastatic, 367 radiation therapy of, 638
radioactive phosphorus (Pm) to detect, 45, 267, 459, 463,

Ulcer, pyocyaneus, 536 Ultrasound, therapy, 667 Ultrastructure, of pigment of retinal epithelium, 812 Ultraviolet, contrast perception with glasses impervious to, 606 light, in perimetry, 142 radiation, and vision, 967
UVEA: bilateral metastatic carcinoma of, 204
melanoma of, differentiation, 318 metastatic tumors of, 867 sarcoma of, with neurofibromatosis, 974 UVEITIS: after cataract extraction, 9 cataract and secondary glaucoma, 570 ehronic, 152 early symptoms of total, 153 electroretinogram in, 292 endogenous, in children, 613 in children, 822 ocular tension changes in, 620 recurrent with hypopyon, 613 sinusitis as focus infection in, 311 streptococcus vaccine in, 824 symposium on, 615 therapy of, 822 vitreous (anterior) in, 973 X-ray treatment in, 615 Uveo-encephalitis, severe forms of, 153 Uveopapillitis, sympathetic, 973

Van der Hoeve syndrome, 251, 981 Vapor lamps, eye complaints due to, 642 Varidase: See Streptokinase Vasodilator therapy, in hemorrhagic glaucoma, 401 in ocular burns, 638 Vasodilators, action on retinal artery, 134 Vegetative dystonia, 832 Venous pressure, ocular tension and, 157 Vernal catarrh, purin exchange in, 612 See also Conjunctivitis, vernal VIRUS: action on embryo (chick), 452 diseases, new treatments for, 607 trachoma: See Trachoma VISION: binocular, ocular dominance and, 815 near, magnification for, 815 stereoscopic, mechanism of, 815 ultraviolet radiation and, 967 VISUAL ACUITY: contact lenses and, 605 ocular lesions and, 139 optokinetic nystagmus to determine, 817 retinal cone distribution and, 466 standard charts to test, 803 Visual adptation, nervous components of, 966
photochemical component of, 966
Visual agnosia, alternating dominance and, 631
Visual aptitudes, in industry, 223 Visual examinations, referral standards for school children, 710

Visual experience, neural correlates of, 968 VISUAL FIELDS: ametropia in, 142 changes, in optic neuritis, 975 in pituitary tumor, 630, 880 color, importance of, 630 defects, in optic neuritis, 273 progression of, in glaucoma, 616 electro-encephalographic examination of, 631 examination of, tachystoscopic, 719 Visual impairment, by protective devices, 642 Visual pathways, acetylcholine metabolism in, 465 Visual perception, 468 of motor vehicle driver, 140 speed of, instrument to measure, 144 Visual performance, among school children, 467 Visual tests, evaluation Ortho-Rater and wall-chart, 699 Yamamori's 6-6-ring, 968 Visual training, graphic method in, 466 VITAMINS: A: dark adaptation and, 464 deficiency, in retinal detachment, 302 B₁: after pituitary removal, 814 and pituitary extract in optic atrophy, 831 B2: in marginal keratitis, 287 C: decomposition, in cataract, 463 deficiency, in cataract, 465 D: in glaucoma, 618 E: 603 in diabetic retinopathy, 581 Vitiligo, of skin and retinitis pigmentosa, 300 VITREOUS: alterations with iridocyclitis, 623 anterior, in uveitis, 973 aspiration, replacement with spinal fluid, 234 changes, in iridocyclitis, 158 cortisone, concentration in, 134 passage into, 134 cysts of, bilateral, 830 examination, with electron microscope, 130 experimental membranes in, 301 filaments (tuna), 813 nitrogen in, 627 operations on, 305 phase-contrast study of, 452 of normal, 131 protein studies of, 456
replacement of, 305
transplants, lyophilic, 626
vascular veils of, 628
vessels, persistence of, and retinal folds, 626 Vogt-Koyanagi syndrome, 292

Waardenburg's syndrome, 850 War, injuries in, socket repair after, 634 Werner's syndrome, 158 Wernicke's disease, 431 Wilson's disease, 846 Wolff, Eugene, 802

X-Y-Z

Xeroderma pigmentosa, 845 Xerosis, corneal, Steno's duct transplantation in, 818 tissue therapy in parenchymatous, 287 X-RAYS: diagnosis of skull, 834 study lesions of zigoma, 139 therapy of, 285 in uveitis, 615 Yale Clinical Conference, 119, 270, 593 Zigoma, X-ray study lesions of, 139 Zonule, phase-contrast study fibers of, 130

INDEX

Authors and Titles

Original Articles and Notes, Cases, Instruments

ABRAHAM. Samuel V.: Intra-epithelial cysts of the iris: Their production in young persons and possible significance, 327

AGARWAL, Lalit P., and DATT, Krishna: Role of nicotinic acid in healing of corneal ulcers, 764 APPLE, Carl: Retrolental fibroplasia: With a discussion

by Kenneth L. Roper, 48
ASCHER, K. W.: Graefe knife incision with M-shaped
conjunctival flap and preplaced corneoscleral-conjunctival suture, 905

ATKINSON, Donald T.: Restored vision by means of the artificial pupil, 403

AVELLO, J. Junceda: Technique of preplaced sutures in keratoplasty, 111

BARKAN, Otto: Narrow-angle glaucoma: Pupillary block and the narrow-angle mechanism, 332; Iridectomy in narrow-angle glaucoma, 504; Primary glaucoma: Patho-genesis and classification, 719; Peripheral iridectomy: Technique, mechanism and the cause of hemorrhage, 889 BECKER, Bernard: Decrease in intraocular pressure in

man by a carbonic anhydrase inhibitor, Diamox, 13 BEDELL, Arthur J.: Ophthalmology in the Union of South Africa: The report of a recent visit, 411 BEDROSSIAN, Robert H., CARMICHAEL, Paul, and

RITTER, Joseph: Retinopathy of prematurity (retro-lental fibroplasia) and oxygen: Part I. Clinical study:

Part II, Further observations of the disease, 78
BOYES, Truman L., and RALPH, Fenn T.: Carotid-cavernous fistula, 262
BROGGI, Richard J.: Repair of severed lacrimal

canaliculi: With hypodermic needle stylet wires used as in-dwelling conformers, 936

BURNS, Thomas A.: See GROSSMANN, Erwin E.

CACCAMISE, William Charles, and OKUDA, Kunio: Takayasu's or pulseless disease: An unusual syndrome with ocular manifestations, 784

CADIGAN, John B.: See DUNPHY, Edwin B.
CAMPBELL, E. Malcolm: See WILSON, John M.
CANCILLA, Michael L.: See STRAATSMA, Bradley R. CARBO, Richard J., Jr.: Ophthalmic diagnostic kit, 117; Eye-dressing tray, 943

CARMICHAEL, Paul: See BEDROSSIAN, Robert H. COLENBRANDER, M. C.: A prism for gonioscopy, 115 COOK, M. K.: See WOODS, Alan C.

DATT, Krishna: See AGARWAL, Lalit P. De HOFF, John B., and OZAZEWSKI, John: Alpha tocopherol to treat diabetic retinopathy, 581 DELLAPORTA, Angelos: Endodiathermy: A method for

sealing macular holes by transbulbar coagulation, 649 DeLONG, Perce: See MULLEN, Carroll R. DEUTCH, Sydney S.: Vitreous aspiration: And replace-

ment with cerebrospinal fluid, 234 DREISLER, Knud K.: See DUNPHY, Edwin B.

DREISLER, Knud K.: See DUNPHY, Edwin B. DUNPHY, Edwin B.: See SLOANE, Albert E. DUNPHY, Edwin B., DREISLER, Knud K., CADIGAN, John B., and SWEET, William: The uptake of radio-active phosphorus by intraocular neoplasms, 45 DUNPHY, Edwin B., LEAHEY, Brendan D., REGAN, James J., SLOANE, Albert E. YASUNA, Elton R., STUART, Harold C., GALLAGHER, J. Roswell, and SCHMIDT, William: Standards for referral of school children for an averagination, 710 children for an eye examination, 710

DUSZYNSKI, Leonard R.: Cytology of the conjunctival sac: A quantitative and qualitative study, 576

ECKER, Arthur: See JOY, Harold H. EGAN, John A.: A new test for accommodation, 429 EMMONS, William V.: See SLOANE, Albert E.

FALLS, Harold F .: Clinical detection of the genetic carrier state in ophthalmic pathology: The Jackson Memorial Lecture,

FINK, Walter H.: Present concept of superior oblique surgery, 548
FLOCKS, Milton: See HARRINGTON, David O.
FRAYER, William C. See YASUNA, Jules M.

GALLAGHER, J. Roswell: See DUNPHY, Edwin B, See also SLOANE, Albert E.

GEORGARIOUS, Vasilios M.: Melanosarcoma of the iris: Report of a case, 781.
GORDON, D. A., ZEIDNER, J., ZAGORSKI, H. J., ORDON, D. A., ZEIDNER, J., ZAGORSKI, H. J., and UHLANER, J. E.: A psychometric evaluation of

Ortho-Rater and wall-chart tests, 699 GORDON, Dan M.: Hydrocortisone in ophthalmology,

GRIEVES, Martha: See MARR, William G. GROSSMANN, Erwin E., and BURNS, Thomas A.: Clinical use of orbitonometry, 520 GUERRY, DuPont, III: See WILLIAMS, Richard

Kennon

GUILLETTE, James L., and MAYER, Walter: Throm-bosis of the central retinal artery: Report of a successfully treated case, 578

HAMLIN, H.: See HIRSCH, O. HARRINGTON, David O., and FLOCKS, Milton: Visual field examination by a new tachystoscopic pattern method. 710

method, 719
HARRISON, Saul I.: See MATHER, Robert W.
HEATH, Parker: Essential atrophy of the iris: A
histopathologic study, 219; Clinical pathologic conference, 107, 254, 405, 544, 774, 931
HENCH, Miles E.: See WILLIAMS, Richard Kennon

VAN HERICK, William: See MILLER, William A. HIRSCH, O., and HAMLIN, H.: Fate of visual fields

and optic discs in pituitary tumors, 200
HOLLANDER, W. M.: See MANNING, Ephraim L.
HOHN, Anselm C.: See STRAATSMA, Bradley R.
HORWICH, Harry, and TURTZ, Arnold: Experimental evaluation of Hydrosulphosol®, 239 HOWELL, Stacy C .: The craniostenoses, 359

ILIFF, Charles E.: A simplified ptosis operation, 529

JACOBS, Leon: See WOODS, Alan C.
JOY, Harold H., ECKER, Arthur, and REIMEN-SCHNEIDER, Paul A.: The role of cerebral angiography in ophthalmology: Normal anatomy: Preseliar and su-prasellar tumors: Ocular complications, 55

KENNEDY, Roscoe J., and KING, Robert W.: Carcinoma of the meibomian gland: A case report, 259
KING, Robert W.: See KENNEDY, Roscoe J.
KIRBY, Daniel B.: Causes of failure of cataract operations, 47

KIRSCH, Ralph E., and STEINMAN, William: Spon-taneous rupture of the anterior hyaloid membrane fol-

lowing intracapsular cataract surgery, 657 KOZIAK, P. H.: Craniostenosis, 380

LEOPOLD, Irving H.: See WUDKA, Enrique LASKY, Mortimer A.: See OSTRIKER, Paul J. LEAHEY, Brendan D.: See DUNPHY, Edwin B. LINCOFF, Harvey A.: Management of the psychotic pa-

tient for ocular surgery, 854 LIPSIUS, Edward I.: Postoperative endophthalmitis: A case report and discussion of clinical aspects and treat-

LYLE, Donald J., and Mayfield, Frank H.: Retraction nystagmus: A case report, 177

McGANNON, William J.: A new lens forceps, 111
McKEE, Thomas P.: See WILSON, John M.
MANNING, Ephraim L., and HOLLANDER, W. M.:
Glaucoma and electroshock therapy, 857

MARR, William G., WOOD, Ronald M., and GRIEVES, Martha: Further studies on the effect of agents on regeneration of corneal epithelium, 544

MARSHALL, Don: Glioma of the optic nerve, 15
MATHER, Robert W., SHUMAN, Charles R., and
HARRISON, Saul I.: Influence of curare and eserine

on ocular tension following electroshock, 559
MAYER, Walter: See GUILLETTE, James L.
MAYFIELD, Frank H.: See LYLE, Donald J.
MAXWELL, Earl: Metastatic tumors of the uveal tract,

MEDINE, Myer M.: See PRIESTLEY, Bruno S.
MILES, Paul W.: An analysis of depth factors in
anisopia and anisodominance, \$\$\$
MILLER, George E.: See WILSON, John M.
MILLER, William A., and Van Herick, William:
Primary optic atrophy in von Recklinghausen's disease:

Primary optic atrophy in von Recklinghausen's disease: Report of a case, 36
MOOR, William A.: See PRATER, B. G.
MORRISON, W. Howard: Stability of aqueous solutions commonly employed in the treatment of primary glaucoma: Part I. The pharmacology of miotics, 391; Part II. Drug passage, 357; Part III. Experimental procedure and findings: Summary and conclusions, 744
MULLEN, Carroll R., DELONG, Perce, and STEIN-METZ, Charles G., III: Bilateral metastatic carcinoma of the uveal tract with orbital extension, 264

NICHOLLS, John V. V.: Macular edema in association with cataract extraction, 665

OJERS, Gaylord W.: See YASUNA, Jules M. OKUDA, Kunio: See CACCAMISE, William Charles OSTRIKER, Paul J., and LASKY, Mortimer A.: Congenital eversion of the upper cyclids, 779 OZAZEWSKI, John: See De HOFF, John B.

PASCAL, Joseph I.: The principle of the bicentric lens

in anisometropia, 706
PHILLIPS, Carlton C.: See SCHLOSSMAN, Abraham
PLATT, Edward S.: Orbitocranial penetrating injuries, 758

PRATER, B. G., and MOOR, William A.: Erythromycin: A report on a new ophthalmic ointment, 938
PRIESTLEY, Bruno S., and MEDINE, Myer M.: A new attachment for the projection perimeter, 261

QUINN, James R.: See RUNDLES, Walter Z.

REGAN, James J.: See DUNPHY, Edwin B. REIMENSCHNEIDER, Paul A.: See JOY, Harold H. RIFFENBURGH, Ralph S.: Arteriovenous aneurysm of the retina, 90

the retina, 1000
RITTER, Joseph: See BEDROSSIAN, Robert H.
RIZZUTI, A. Benedict: An iris retractor and expressor:
For round-pupil intracapsular cataract extraction, 100
ROBERTS, N. Craig: See RUEDEMANN, A. D.
RUCKER, C. Wilbur: See TAUB, Robert G.
RUEDEMANN, A. D., ROBERTS, N. CRAIG, and
SELIGSON, A. R.: Voluntary luxation of the globes:

Report of a case, 351
RUNDLES, Walter Z., and QUINN, James R.: Management of acute ocular lime burns, 309

SAGGESE, Domingo A.: The fundu. in tuberculous meningitis in children, 215
SATO, Tutomu: A new approach to pterygium operation,

SCHER, Harold G.: See YASUNA, Jules M. SCHER, David: Systemic complications of retinal de-

'tachment surgery, 542

SCHLOSSMAN, Abraham, and PHILLIPS, Carlton C.:
Optic neuritis in relation to demyelinating diseases:
A clinical study, 467

SCHMIDT, William: See DUNPHY, Edwin B.
SELIGSON, A. R.: See RUEDEMANN, A. D.
SHAFFER, Robert N.: Alpha irradiation: Effect of

astatine on the anterior segment and on an epithelial cyst, 183

SHUMAN, Charles R.: See MATHER, Robert W. SITCHEVSKA, Olga: Metastatic carcinoma of the choroid,

SLOANE, Albert E.: See DUNPHY, Edwin B. SLOANE, Albert E., DUNPHY, Edwin B., EMMONS, William V., and GALLAGHER, J. Roswell: A comparison of refraction results on the same individuals,

SMILLIE, John W.: The effect of streptokinase on simulated hyphema: With a study of its toxicity to anterior chambers of rabbits, 911

SMITH, Homer E.: Aplasia of the optic nerve, 498 STECKLER, M. I.: Baggy eyelids: Technique for repair, 113

STEINMAN, William: See KIRSCH, Ralph I

STEINMETZ, Charles G., III: See MULLEN, Carroll R. STEPANIK, Josef: Measuring velocity of flow in aqueous

veins, 918 STERN, John J.: Vasodilator therapy for hemorrhagic

glaucoma, 401 STRAATSMA, Bradley R., CANCILLA, Michael L., and HOHN, Anselm C.: Anterior lenticonus: Review and a

case report, 197
STUART, Harold C.: See DUNPHY, Edwin B.
SWAN, Kenneth C.: Iris pigment nodules complicating
miotic therapy, 266

SWEET, William: See DUNPHY, Edwin B.

TAUB, Robert G., and RUCKER, C. Wilbur: The rela-tionship of retrobulbar neuritis to multiple sclerosis,

TEITGEN, Ralph E .: Single installation of cycloplegic solutions. 640

solutions, 740
THEOBALD, Georgiana Dvorak: Pseudo-exfoliation of
the lens capsule: Relation to "true" exfoliation of the
lens capsule as reported in the literature and role in the production of glaucoma capsulocuticulare, 1

TRANOS, Lucy: Mandibulofacial dysostosis associated

with dermolipoma of the conjunctiva, 354
TRUHLSEN, Stanley M.: Rosinophilic granuloma involving the orbit: Report of a case, 571
TURTZ, Arnold: See HORWICH, Harry

UHLANER, J. E.: See GORDON, D. A.

WADSWORTH, Joseph A. C.: Complications following cataract extraction: With emphasis on pathologic documentation, 672

WAINSTOCK, Michael: New instruments for corneal repair and corneoscleral suturing, 428
WALDAPFEL, Richard: Location of congenital dacryo-

stenosis in children, 768

WHITE, J. Warren: Malignant melanoma of the choroid: Report of a case with evaluation of early diagnosis,

WILLIAMS, Richard Kennon, HENCH, Miles E., and GUERRY, DuPont, III: Pyocyaneus ulcer: Clinical re-port and experimental investigation, 538

WILSON, John M., McKEE, Thomas P., CAMPBELL, E. Malcolm, and MILLER, George E.: Air injection in the treatment of traumatic hyphema, 409

WITMER, R.: Periodic ophthalmia in horses, 243 WOOD, Ronald M.: See MARR, William G. See also WOODS, Alan C.

WOODS, Alan C., JACOBS, Leon, WOOD, Ronald M., and COOK, M. K.: A study of the role of toxoplas-mosis in adult chorioretinitis, 163

wUDKA, Enrique, and LEOPOLD, Irving H.: The action of curare alkaloids on the pupil, 41 WYMAN, George J.: Glaucoma induced by air injections into the anterior chamber, 424

YASUNA, Elton R.: See DUNPHY, Edwin B. YASUNA, Jules M., OJERS, Gaylord W., FRAYER, William C., and SCHEIE, Harold G.: An experimental study of the effect of cortisone on the eye, 23 ZAGORSKI, H. J.: See GORDON, D. A.

ZANKAN, Leo: Benign calcified epithelioma of the eye-

ZEIDNER, J.; See GORDON, D. A.

AMERICAN JOURNAL

OF

OPHTHALMOLOGY

THIRD SERIES FOUNDED BY EDWARD JACKSON

VOLUME 38 July-December, 1954

EDITORIAL STAFF

DERRICK VAIL, Editor-in-Chief LAWRENCE T. Post, Consulting Editor

BERNARD BECKER
WILLIAM L. BENEDICT
FREDERICK C. CORDES
SIR STEWART DUKE-ELDER
EDWIN B. DUNPHY
F. HERBERT HAESSLER
PARKER HEATH
S. RODMAN IRVINE
JAMES E. LEBENSOHN

DONALD J. LYLE
WILLIAM A. MANN
P. ROBB McDonald
FRANK W. NEWELL
JOHN V. V. NICHOLLS
ALGERNON B. REESE
PHILLIPS THYGESON
M. URIBE TRONCOSO
ALAN C. WOODS

KATHERINE FERGUSON CHALKLEY, Manuscript Editor MILDRED SKINNER, Advertising and Business Manager

COLLABORATORS

K. W. Ascher, Cincinnati; Charles A. Bahn, New Orleans; Theodore Bisland, Washington, D.C.; Eugene M. Blake, New Haven; Frederick C. Blodi, Iowa City; Sylvan Brandon, Houston; James W. Brennan, Buffalo; Alston Callahan, Birmingham; Francis C. Crage, Chicago; Beulah Cushman, Chicago; Louis Daily, Jr., Honston; Ray K. Daily, Houston; Alice R. Deutsch, Memphis; Orwin H. Ellis, Los Angeles; Irwin E. Gaynon, Milwankee; Bertha T. Haessler, Milwankee; David O. Harrington, San Francisco; Max Hirschfelder, Centralia, Illinois; Harry Horwich, New York; Morris Kaplan, Denver; Peter C. Kronfeld, Chicago; Vito Larocca, New York; Claude L. Larue, Shreveport, Lonisiana; Gyula Lugossy, Budapest; Harry K. Messenger, Boston; Benjamin Milder, Saint Louis; Robert A. Moses, Delavan, Wisconsin; Bennett W. Muir, Denver; Joseph I. Pascal, New York; Edward Saskin, Brooklyn; Ernst Schmerl, Toledo; Theodore M. Shapira, Chicago; John J. Stern, Utica, New York; V. Tadone, Juliano, Malla; George S. Tyner, Denver; A. Urrets-Zavalia, Jr., Cordoba, Argentina; H. C. Weinberg, University Heights, Ohio.

Published by the Ophthalmic Publishing Company 664 North Michigan Avenue, Chicago 11, Illinois

COLOR ILLUSTRATIONS

VOLUME 38 July-December, 1954

HEMATOPOIESIS IN AND AROUND THE EYE. Figure 3b. No. 329. A large focus of hematopoiesis in the choroid with considerable thickening. Figure 3c. No. 329. A large focus of hematopoiesis in the choroid with eosinophilic myelocytes and leukocytes. Figure 4. No. 144. Immature blood cells in the choroid. Algernon B. Reese and Frederick C. Blodi (Part II, July)	214
CICATRICIAL STAGE OF RETROLENTAL FIBROPLASIA. Figure 2A. The ciliary processes appearing black around the periphery of the retrolental tissue in Grade V of the disease. Figure 2B. The ciliary processes appearing red around the periphery of the retrolental tissue in Grade V of the disease. Figure 4. Grade II retrolental fibroplasia, showing two holes with flap edges in the periphery temporally. Figure 5. Grade III retrolental fibroplasia, showing the vascular pattern on and around the retinal fold. The pigment conus around the disc is opposite to the retinal fold which is temporal and below. Algernon B. Reese and Josef Stepanik	
facing page	308

SUBJECT INDEX

Explanation: Numbers in boldface refer to original contributions. The asterisk (*) preceding the page number indicates that the paper was published in Part II of the July issue.

Abnormalities: See under Congenital Anomalies and under names of various organs and regions ABSTRACTS: 114, 255, 423, 583, 743, 876

1. Anatomy, embryology, and comparative ophthal-mology: 114, 423, 743 2. General pathology, bacteriology, immunology: 115. 424, 743

Vegetative physiology, biochemistry, pharmacology, toxicology: 116, 425, 583, 745

4. Physiologic optics, refraction, color vision: 121, 430, 584, 749

5. Diagnosis and therapy: 124, 435, 588, 781, 876
6. Ocular motility: 438, 593, 782, 877
7. Conjunctiva, cornea, sclera: 255, 442, 594, 754, 879
8. Uvea, sympathetic disease, aqueous: 269, 444, 596,

9. Glaucoma and ocular tension: 265, 445, 597, 757, 882

Crystalline lens: 270, 446, 599, 758, 887
 Retina and vitreous: 270, 446, 600, 758, 887
 Optic nerve and chiasm: 275, 601, 892

Neuro-ophthalmology: 276, 447, 602, 760, 892
 Eyeball, orbit, sinuses: 277, 447, 603, 761, 894
 Eyelids, lacrimal apparatus: 279, 448, 606, 895
 Tumors: 279, 448, 606, 898

17. Injuries: 281, 449, 899

18. Systemic disease and parasites: 282, 450, 607, 900
19. Congenital deformities, heredity: 285, 451, 609, 901
20. Hygiene, sociology, education, and history: 286, 451, 669, 902

Accommodation, convergence and, 750

in darkness, 749 influence test object size on time of, 751 measurement of, with concave lens, 432

Achromatopsia: See Color Blindness Acrodynia, eye symptoms of, 901 Acrylic lenses, in anterior chamber, 588

ACTH: in uveitis, 596

influence on ocular tension, *122, 655 influence on retinal metabolism, 117

influence on vascular bed of eye, *122, 655 role in diabetic retinopathy, *53 Adaptation, dark: See Dark Adaptation

Adaptometer, automatic recording, 586

Adenoma, pituitary, 721

Adenocarcinoma, implanted in rabbit anterior chamber, 743

Adenxa, tumors of, 860

Adolescents, refraction errors in, vocations and, 451 Age, refraction changes and, 123

AGED: eye operations in, 238, 239 eye problems in, 235

glaucoma in, 239

keratoconjunctivitis sicca in, 238

optic atrophy in, 239 refraction in, 240

removal eyelid epithelioma in, 240

retinal detachment operation in, 238 tearing in, 238

vision in, 235

vitamin deficiency in, 241 Agriculture, metallic foreign bodies in, 899

Air, injections, subconjunctival in eye surgery, 877

sickness, eyes of animals with, 425 Akinesia, anesthesia and, 592 lid paresis induced by oculomotor, 395

Lidocaine for, 78

Albers-Schoenberg disease, 285 Alcaptonuria, seleral pigmentation in, 879

ALLERGY: manifestation of, in ophthalmology, 115 phlyctenular conjunctivitis due to, 756 psychogenic, retrobulbar neuritis and, 115

therapy of ocular, 125

to hydrocortone and atropine, 595 to lens proteins, 744

to pollen, vernal conjunctivitis and, 755

Amaurotic idiocy: See Idiocy

Amblyopia, treatment of, 434

American Academy of Ophthalmology, 1954 meetings, 732 American Medical Association, 1954 meeting, 248 American Ophthalmological Society, 1954 meeting, 248

Amino acids of vitreous, 583 ANESTHESIA: akinesia and, 592

for children, 436

in cataract extraction, 599 Lidocaine for, 78

retrobulbar, agents used in, 430 surface, Novesina for, 119

Anesthetics, for retrobulbar injection, 430 local, conjunctival stainability after, 351

corneal stainability after, 351

ANEURYSM: arteriovenous, due to trauma, 404 of retina, 446

capillary, in systemic diseases, 126 intracranial, ocular symptoms of, 125, 892

of cavernous sinus, 602, 760 of internal carotid, 760

Angle, anterior, in anterior-segment inflammation, 622

Angioblastoma of orbit, 898 Angioid streaks, 759

Angioma of conjunctiva, with Recklinghausen disease, 290

Angiomatosis retinae, 275

Angioscotoma, effect nicotine on, 266 Aniseikonia, research with eikonometer, 121

retinal irradiation and, 588
ANTERIOR CHAMBER: acrylic lenses in, 588

adenocarcinoma implantation in (rabbit), 743 angle by transillumination, 124

delayed restoration of, 453 fluorescence of, 125

Anterior segment, hypoplasia and congenital hydro-cephalus, 451

inflammations of, study anterior angle in, 622
ANTIBIOTICS: chemotherapeutic agents and, 589
clinical use of, 590

Colimycin, 121 combinations of, 436

experimental considerations in use of, 589 general considerations in use of, 589 -producing bacteria, in conjunctivitis, 115 in normal eyes, 115

See also under names of various antibiotics Antibodies, in aqueous, 862

Antibody determinations, by capillary tube, 744 Anticoagulants, experimental study of, 426 Antihistamines, local application of, 876

APHAKIA: contact lenses in, 432

monocular, contact lenses in, 587 fitting of, 586

AQUEOUS: anterior pituitary hormone in, 117 antibodies in, 862

chloride concentration, lens transparency and, 120 corticosteroids in, *101

diffusion isonazide in, 119

electromicroscopic examination of, 886 elimination, tonometric measurement and, 116 flow, anterior chamber restoration and, 453

glucose content in chorioretinal degeneration, 746 outflow, 749

diurnal tonographic variations and, 629 protein fractions of, electrophoretic study, 745 vitamin B₁ distribution in, 117

vitamin C in, in cataract, 118 Aqueous veins, diurnal tension variations and visibility of, 629

effect compensation-maximum test on, 268

in glaucoma, 882 Arachnoiditis, chiasmal, **722** Argyll Robertson pupil: See Pupil

Argyrosis, with lens involvement, 402

Arteritis, temporal, 900

ARTERITIS (continued) ocular manifestations of, 282 syndrome of, with ocular involvement, 495 Ascorbic acid: See Vitamin C Association for Research in Ophthalmology: auditors' report, *225 business session, *224 directory of members, *229 1954 meeting, *240 officers, *229 Astatine, dosage of, 251 ASTIGMATISM: 40 corneal, 407, 586 watchglass nails, bronchiectasis, and, 284 Atropine sulfate, study of solutions of, 428 Aureomycin, iridocyclitis after treatment with, 882 Australia, ophthalmological society of, 902

Bacteria, antibiotic-producing in conjunctivitis, 115 in normal eyes, 115 Bacteriology of eye, normal flora, 424
Bellini, Giovanni, paintings of, eye abnormalities shown by, 902
Bengal rose, conjunctival stainability with, 351 corneal stainability with, 351
Beta irradiation: See Radiation therapy Biochemistry of eye, 583, 584 Biomicroscope, structure of, 124 Biomicroscopy, 862 to study teratologic changes, 762 Birth weight, visual acuity and, 850 Bitot's spots, in 22 malnourished patients, 367 Blepharitis, herpetic, 896 Selsun in marginal, 560 Blepharoptosis, consensual, 605 surgical methods in, 129 Blindness, night: See Night blindness optometric rehabilitation in, 432 Blindspot, mechanism in strabismus, 765 Blood, to treat corneal diseases, 444 vitamin C in, in cataract, 118
BLOOD-AQUEOUS BARRIER: after radioactive penicillin, 117 clinical aspects of, 377 in contralateral light stimulation, 430 influence B-piridilearbinol on, 130 permeability of, action adenosine triphosphate on, 748 effect nembutal on, 746

Blood pressure, hypertensive eye changes and, 700 in glaucoma tests, 885 BOOK REVIEWS: Amsler, M., Brueckner, A., Franceschetti, A., Gold-mann, H., Streiff, E. B.: Textbook of Ophthal-mology, 112 Antiseptie, 23

Blood loss, visual disturbances after acute, 817

Archives of the Ophthalmological Society of Northern Greece, 233

Bulletin of the Belgian Ophthalmological Society, 420,

Bulletin of the Ophthalmological Society of Egypt, 420 Bulletin of the French Ophthalmological Society, 573 Bulletin of the Ophthalmological Societies of France, 872

Calamandrei, G., Ferrata, L., and Montanari, L.: Ormone Corticotropo e Cortisone in Oftalmologia, 581

Conn, Howard F.: Current Therapy, 422 Conn. Howard F.: Current Incrapy, 422 Csapody, István: Orbital Plastic, 579 Duke-Elder, Sir Stewart: Parsons' Diseases of the Eye, 251; Textbook of Ophthalmology: Volume VI,

Fox, Sidney A.: Ophthalmic Plastic Surgery, 252
Guillaumat, L., Schiff-Wertheimer, S., Offret, G., and
Dubois-Poulsen, A.: Ophtalmologie, 422
Hardy, L. H., Rand, G., Rittler, M. C., Blank, A. A.,
and Boeder, P.: The Geometry of Binocular Space
Perceptions, 552

Jaensch, P. A.: Schproben nach A. Roth, 420 Lyle, T. Keith: Lyle and Jackson's Practical Orthoptics in the Treatment of Squint, 579 Mann, Ida: Ophthalmic Survey of the Kimberley Di-vision of Western Australia, 741 vision of Western Australia, 741
Michaelson, L. C.: Retinal Circulation in Man and
Animals, 419
Nordmann, Jean: Biology of the Lens, 580
Ovio, Giuseppe: Storia dell'Oculistica, 419
Pascal, Joseph I., and Noyes, Harold G.: The Optometrist's Handbook of Eye Diseases, 741
Paufique, L., and Brun, J.: Tuberculoses Oculaires et Tuberculoses Paraganglionnaires, 253 Safar, Karl: Elektrochirurgie am Auge, 740
Salmon, George: A Treatise on Conic Sections, 582
Tower, Paul: Observations on Hole in the Macula,
742 Vail, Derrick, and Lindsay, John R.: The Year Book of the Eye, Ear, Nose, and Throat, 111 Zuckermann, Joshua: Perimetry, 875 Botulism, eye manifestations of, 282 Bowen's disease, 652 Boxing injuries, 449

BOOK REVIEWS (continued)

Bücklers: A reappraisal, 251

B-piridilcarbinol, influence on blood-aqueous barrier, 120

Canadian Ophthalmological Society, 734 Canal of Schlemm: See Schlemm's canal Carbon dioxide, in retrolental fibroplasia, 342 CARCINOMA: of choroid, 97, 448 deriving from caruncle, 896 metastatic, of eye and adnexa, 449 of optic papilla, 607 Cardiac arrest, visual loss during, 749 Carotene levels, 810 Carotid, ophthalmodynamometry in lesions of, 437 Caruncle, carcinoma of, 896 CATARACTS: 861 after iridocyclitis, 268 antiglaucoma operations and, 269 biochemistry of, 117 congenital, iris bombé complicating discission for, 887 dinitrophenol, vitamin C and, 583 EXTRACTION: after glaucoma operations, 599 anesthetic for, 599 anterior-chamber restoration after, 450 Baron Wenzel's operation for, 518 bis-cholinesters and hyaluronidase in, 429 complications of, cortisone in, 201 Neosone in, 201 Harrington erisophake in 50, 268 hyphema after, 887 in rosacea keratitis, 879 lid retractor for, 438 pupil contraction during, 269 recurrent congestion after, 106 sutures in, 240 wound rupture after, 887 formation of, after beta radiation, 465 galactose-induced, influence thiouracil on, 426 influence thyroid on, 426 pathogenesis, 746 proteins in diet and, 430 medical treatment of, 887 membranous, iritis and, 443 permeability, 269 postnatal in premature infants, 65 posttraumatic, calcareous, 268 radiations, ciliary body in, 673 senile, vitamin C metabolism in patients with, 446 skin lesions and, 609 vitamin C, in aqueous in, 118 in blood in, 118 metabolism, in patients with senile, 446 Cavernous sinus, aneurysms involving, 602 injuries involving, 602 tumors, involving, 602

Cerebral thrombosis, ocular signs of, 276 Correctopia, 721 CORNEA: and sclera, a review, 443 Chicago Ophthalmological Society, 573, 721 CHILDREN: anesthesia for, 436 anesthesia, Dorsacaine for, 748 astigmatism, 407, 586 blind, poking eyes in, 287 eye findings in, after toxemia of pregnancy, 283 mentally retarded, visual performances of, 433 basement membrane of, histochemistry of, 171 caterpillar hair in, 256 premature: See Infants, premature changes of, after sulfathiazole, 442 psychologic approach to eye problems of, 437 channels of, 115 retrolental fibroplasia in: See Retrolental Fibroplasia CONICAL: 594 uveitis in, 262 acute, 880 after thyroidectomy, 595 visual tests for school, 587 Chloramphenicol, in trachoma, 256 glaucoma and, 595, 879 keratoglobus and, 755 Chlorpromazine, a new anti-emetic agent, 576 Chorionepithelioma, metastatic to choroid, 449 ocular tension and, 879 Chorioretinal degeneration, aqueous glucose content in, pathogenesis of, 879 retinitis pigmentosa and, 901 lens changes in, 746 treatment of, 880 cystine crystals in, 256 degeneration of, "crocodile skin," keratitis, and, 258 Chorioretinitis, diathermic, in retinal detachment, 271 proteins in lens in, 117 hyaline, 257 toxoplasmie in adult, 261, 264 serologic data in, 262 dehydrases of, 427 CHOROID: atrophy of, gyrate, 260 diseases of, blood to treat, 444 carcinoma of, 97, 448 thromboplastin to treat, 596 dystrophy of, fatty, 594 intraocular surgery and, 240 chorionepithelioma metastatic to, 449 hernia of, scleral grafting in, 595 melanoma of, 163, 445, 597 EPITHELIUM of: erosion of, 255 nutritional dystrophy of, 444 carcinoma of neck and, 898 regeneration, action of alloxan on, 428 melanosis of, 280 tuberculoma of, 444 tumors of, 97, 163, 280, 444, 445, 448, 449, 597, 898 effect chloramphenicol on, 745 effect chlorophyll on, 745 Choroiditis, with lymphocytic choriomeningitis, 231 CILIARY BODY: effect intracarotid injections of dye effect cod-liver oil on, 745 examination of, by keratography, 880 on, *153 foreign bodies of, treatment of deep, 879 glass membranes of, 443 in accommodation, 434 healing of, delayed after foreign bodies, 281 and convergence, 434 hydration of, role metabolism in, "182 in radiation cataract, 673 lipids of, 745 transport inorganic ions and, *174 keratitis: See Keratitis melanoma of, 104, 597 tumors of, gonioscopy in diagnosing, 263 lipids of, 745 lysozyme of, herpetic infections and, 118 myxofibromas of, 756 Ciliary muscle, antagonistic innervation of, 434 Ciliary processes, glycolytic activity of, 747 nutrition supply of, *174
paracentesis of, lens transparency after, 748 Clinical pathologic conference, 88, 222 Coats' disease, chemistry subretinal fluid in, 760 clinicopathologic study of, 852 pathology of, 747 physiology of, 747, 748 protection of, in beta radiation, 428 Colimycin, a Japanese antibiotic, 121 Coloboma, of optic disc, 892 Color blindness, congenital, 124 in exophthalmos, 880 in lagophthalmos, 880 total, 751 Color sense, senile changes in, 434 Color vision, test for, H-R-R plates in, 437 stainability of, after local anesthetics, 351 stereophotogrammetric reproduction of, 750 vitamin C, in physiology of, 431 Congenital anomalies, colobomatous, 901 microphthalmos, 716 structure of rat, *40 thickness of, after diathermy coagulation, 746 tissue of, biochemical modifications of, 119 See also under names of various organs and regions transplanted, 754 CONJUNCTIVA: aneurysms of, in systemic disease, 126 ULCERS: dendritic, 100 angioma of, with Recklinghausen's disease, 280 treatment of infected, 756 vitamin A in healing of, 810
CORNEAL TRANSPLANTATION: clamp for, 438 bacteriologic examination of, survey of 3,000 patients, 374 experimental, 754 cytologic study of, 444 histologic study of, 444 grafts, slope of sides of, 258 lacrimal apparatus, and cyclids: a review, 279 in rosacea keratitis, 879 melanoma of, 280 melanosis of, 280 lamellar, 754 new method of grafting, 755 stainability, after local anesthetic, 351 opacification of grafts, 257 CONJUNCTIVITIS: allergic, chlortrimeton maleate in, penetrating, sutures in, 349 recipient bed, slope of sides, 258 256 scope of, 258 cortogen in, 256 bacteriologic survey of, in 3,000 patients, 374 technique of, developed in New Zealand, 689 phlyctenular, due to allergy, 756 vernal, 260, 859 therapeutic, 256 total, 105 allergy to pollen and, 755 CONTACT LENSES: clinical survey of 600 cases, 750 CORRESPONDENCE: a brigadier general, 111 astatine dosage, 251 Bücklers: a reappraisal, 251 corneal, fitting and use of, 750 lacrimal-sac obstruction, 870 postgraduate quiz, 577 glass, effect of ventilation on, 585 in aphakia, 432, 587 pterygium operation, 418
pulseless disease and oxygen studies, 418 fitting of, 586 Convergence, accommodation and, 750 cyclophoria, elevation, and the system of axes, 430 Corticosteroids, in aqueous humor, *101 Corticotropin, in syphilitic interstitial keratitis, 443 insufficiency, 441

DIATHERMY (continued)

CORTISONE: 438, 591 in clinical tuberculosis, 751 in complications of cataract extraction, 201 in herpetic keratitis, 283 in optic-nerve lesions, 751 in syphilitic interstitial keratitis, 443 in uveitis, 596 influence on ocular tension, *122 influence on vascular bed of eye, *122 iontophoresis with, 435 ocular tension and, *122, 266 -produced exophthalmos (rats), 743 topical, 591 Crouzon's disease, 573 Curare, 591 Cyclitis, traumatic, limbal suture in, 281 Cyclodialysis, goniotomy and, in congenital glaucoma, Cyclodiathermy, in glaucoma, follow-up study, 242 Cyclopentolate hydrochloride, as a cycloplegic, 831 as a mydriatic, 831 Cyclophoria, convergence, elevation, and the system of axes, 430 Cycloplegics, cyclopentolate hydrochloride as, 831 three new, 427 Cylindroma, of orbit, 604 Cysteine, to protect cornea in beta radiation, 428 Cystinosis, 236 CYSTS: formation of, in pterygium, 756 hydatid, of orbit, 761 of iris, after miotics, 445 diathermy congulation to treat, 513 of orbit, 761 of retina, anterior dialysis and, 891

Dacryoadenitis, 88, 106 Dacryocystitis, acute, 897 Dacryocystography, 448 Dacryocystorhinostomy, 256 Dacryostomy, 571 Dark adaptation, in genital disorders in women, 839 reaction time during, 584 to complete darkness, 122 to intermediate levels, 122 Darkness, accommodation in, 749 Definition of ophthalmic terms, 902 Dermatitis, cataract and, 609 of eyelids, therapy in, 897
Depth perception, influence refraction anomalies on, 587
Descemet's membrane, ultrastructure of, 114
DIABETES: experimental, 900
hemodynamic changes in, 282 morphologic changes in, 282 retinopathy and hypertension, 450 scular disturbances in, 889 DIABETIC RETINOPATHY: ACTH in, *53 capillary aneurysms in, 126 care of diabetes and, 607 diabetes mellitus, hypertension, and, 450 diabetic angiopathy and, 890 insulin and, 427 plasma lipids and, 607 proteins in blood in, 283 rutin in, 890 severity of diabetes and, 607 vasodilators and, 237 vitamin B₁₂ in, *53 vitamin B₁₁ in, -33
Diagnosis, radioactive phosphorus in, *93, 436, 590
use of Haidinger's brushes phenomenon in, 661
Diamox, in glaucoma therapy, 109, 757
influence on ocular tension, 884
DIATHERMY: in hypertensive uveitis, 596 in intraocular tumors, 898 in iris cysts, 513 in retinal detachment, results different forms of, 891 in uveal melanoma, 889

lens-capsule permeability after sclera?, 758

retrociliary, in glaucoma, 886 indications for, 862 Diencephalon, eye and, 429 melanophoric hormone, light sense, and, 600 Digitalis, visual symptoms of toxicity, 400 Diplopia, correction of, after orbital fracture, 441 monocular, after recovery from strabismus, 877 technique, for balanced refraction, 562 Doheny, Estelle, Lecture, 1 Dorsacaine, for corneal anesthesia, 148 Drugs, anesthetics for retrobulbar injection, 430 cycloplegic, 427 Dysmetria, 276 Dysostosis, craniofacialis, 573 mandibulofacial, 285 Eales' disease, 862 Ectopia lentis, 609 congenital, 758 familial, 285 Marfan's syndrome and, 269 Ectropion, congenital of upper lid, 279 luxurians, tarsus excision in, 226 senile, analysis of types of, 787 surgical correction of, 787 Eczema, due to hydrocortone and atropine, 595 EDITORIALS: Apology, 866 Canadian Ophthalmological Society: 1954 meeting, 734 Chlorpromazine: A new anti-emetic agent, 576 Dedication of the Proctor Laboratories, 866 Diamox and the therapy of glaucoma, 109 June meetings, 248 1954 Academy meeting, 732
Pan-American Association of Ophthalmology: III interim meeting, 735 Postwar ophthalmology in Japan, 413 XVII International Congress of Ophthalmology, 247, 575, 728 Standardization of tonometers, 363 Egypt, trachoma in, 286 Ehlers-Danlos syndrome, 272 Electric stimulation of colliculus, eye symptoms of, 276 Electrocoagulation, in trachoma, 255 Electroencephalography, in retrolental fibroplasia, 337 Electromyogram, of human eye muscles, 753 Electro-oculography, to study nystagmus, 752 to study oculomotor disturbances, 752 Electroretino-encephalography, 122 Electroretinogram, recording of, *60 Electroretinography, 724, 862 in night blindness, *70 in retinal artery occlusion, 272 in retinal circulation disturbances, 272 in senile macular degeneration, 273 origin of, *78 Electroshock, eye signs in, 277 Emetine hydrochloride, in herpes zoster, 894 Endangiitis obliterans, eye involvement in, 283 Endocarditis, eye manifestations of, 744 Endocrine disturbances, retinitis pigmentosa and, 275 Endophthalmitis, lens-induced, healing lens capsule and, Entropion, repair of severe, 544 surgery of, 97 Epibulbar tumor, 280 Epileptics, Bailliart's sign in, 667 Epiphora, causes of, 824 surgery for, 824 Epithelioma, benign calcifying, 449 cystic, of eyelid, 606 of orbit, 894 Erisophake, Harrington in 50 cataract extractions, 268 Esotropia, 567 intermittent and accommodative, 191 See also under Strabismus Exenteration, of orbit, 762

EXOPHTHALMOS: corneal protection in, 880 cortisone-produced (rats), 743 endocrine, 1, 609 hypophyseal, 11 malignant, 894 -producing principle, in pituitary extracts, *107 progressive, 8 surgery for eye complications of, 15 thiouracil causing, 761 toxoplasmosis with, 634 unilateral, 11 Exotropia, diagnosis in, 58 surgery of, 178 See also under Strabismus Eye, blind, retention of, 277 hospital, facilities and nursing procedures, 611 problems, in aged, 235 tumors of, 860 EYELID: burns of, treatment, 281, 605 dermatoses of, therapy in, 897 ectropion: See Ectropion edema of, persistent after trauma, 279 entropion: See Entropion epithelioma of, 606 removal of, in aged, 240 histochemical study of, 743 lacrimal apparatus, and conjunctiva; a review, 279 paresis, induced by oculomotor akinesia, 395 plastic surgery of, 279 vaccinia of, 605

Fibroma, of orbit, 604 Fibrinolytic enzymes, in ophthalmology, 877 Fixation, retinal image motions during, 587 FLICKER FUSION: effect cigarette smoking on, 745 in perimetry, 122 mathematical study of, 585 perimeter attachment for, 126 Fluorescein, laboratory experiences with, 120 FOREIGN BODIES: corneal healing delayed after, 281 corneal, treatment of deep, 879 cyclitis after, 281 intraocular, 899 magnetic, removal after 24 years, 90 metallic, in agriculture, 899 Fornix, melanoma of, 228 reconstruction of lower, 75 Fovea, spectral sensitivity of, 123 FUNDUS: abiotrophic alterations of, 596 during blackout, 426 findings, after acute blood loss, 817 in hypercholesteremia, 118 lesions, experimental, 425 in lupus erythematosus, 900 Fusion, binocular, studies of, *134

in binocular vision, 121 of double images, 438

Genetic carrier state, 285 Gifford, Sanford R., Lecture, 765 GLAUCOMA: acute, surgical treatment of, 884 aphakic, vitreous detachment in, 267 aqueous veins in, 882 capsulare, 757 chronic, early diagnosis of, 883 etiopathogenesis, 268 clinic, patients seen in, 885 congenital, cyclodialysis with goniotomy in, 712 congestive, gonioscopic studies in, 267 conical cornea and, 595, 879 cyclodiathermy in, follow-up study of, 242 diagnostic problems of, 757 Diamox in, 109, 757 due to swollen lens, 239 effect nicotine in, 266 epidemic-dropsy, 598 episcleral venous pressure in, 265

GLAUCOMA (continued) Findeisen test in, 265 fistula obliteration and, 267 hydergine in, 445 in aged, 239 infantile, therapeutic indications in, 885 inflammatory, after psychic insults, 445 iris atrophy and, surgical treatment, 881 malignant, vitreous detachment and, 267 ocular hypertension and, 266 operations for, cataract and, 269 cataract extraction after, 599 fistulizing, evaluation after 4 to 32 years, 886 iritis after, 598 new trephining, 21 ozone content of air and, 266 paranitrophenylphosphate in, 883 parenchymatous keratitis and, 442 phasic variations of tension in, 598 physiologic constriction eye veins and, 849 PRIMARY: diagnosis of, 725 indications for surgery in, 446 mechanism of, 723 mechanical, 645 neurovascular, 645 somatotype in, 884 progesterone in, 885 retrociliary diathermy in, 8%6 sclerotomy in, 884 syndrome, pathologic review, 597 therapeutic review, 597 tension regulation in, 599 tests, blood-pressure in, 885 da: 1-room, 598 priscoline for, 885 red visual field for, 599 uveal oxygen uptake in, 884 uveitis, retrobulbar neuritis, and, 615 without hypertension, 883 Glaucomatocyclitic crises, 885 Glucose, role in lens metabolism, *141 Glutamic acid, effect on lens metabolism, *148 Gonioscopy, contact prism for, 435 in congestive glaucoma, 267 in diagnosing tumors of iris and ciliary body, 263 in heterochromia of iris, 264 Goniotomy, cyclodialysis and, in congenital glaucoma, 712 von Graefe, Albrecht: The man in his time, 525, 695, 791 Granuloma, clinical symptoms of, 894 histopathology of, 894 of orbit, 280 Guist's luminous circles, clinical evaluation of, 434 explanation of, 433

Haidinger's brushes phenomenon, clinical use of, 661 in diagnosis eye disturbances, 661 Hands, disinfection of, before surgery, 437 Harada's disease, 232, 263 treatment, 427 Hardy, Le Grand H., 249 Headaches, migraine: See Migraine Hematopoiesis, in and around eye, *214 Hemeralopia, urinary melanophore study of, 850 Hemianopsia, bilateral homonymous, 44 in multiple sclerosis, 602 HEMORRHAGE: optic atrophy after prepartum, 893 subarachnoid, intraocular symptoms and their patho-genesis, 501 See also under names of various organs and regions Heredity, genetic carrier state in ophthalmic pathology, 285 Herpes zoster, 277 Argyll Robertson pupil after, 23 emetine hydrochloride in, 894 Herpetic blepharitis, 896 Herpetic infections, corneal lysozymes in, 118 vitamin H' in, 595 Herpetic keratitis: See Keratitis, herpetic

Heterochromia, Fuchs', 261 INSTRUMENTS (continued) to test infants' vision, 714 of iris, 263 tonometer, applanation, 592 gonioscopy in, 264 Holmes, Edward L., Lecture, 291 trephine, 438 Hormones, anterior pituitary, distribution in aqueous, water chamber for glasses, 126 International Congress of Ophthalmology: See XVII International Congress of Ophthalmology 117 distribution in viterous, 117 in glaucoma, 885 in posterior uveitis, 596 melanophoric, light sense, diencephalon, and, 600 See also ACTH and Cortisone Intraocular lens: See Ridley intraocular lenses Ions, corneal transport of inorganic, *174 Iontophoresis, cortisone with, 435 Iran, trachoma in southern, 665 Hyaloid membrane, hole in anterior, 273 Iridencleisis, ocular tension regulation after, 598 Hyaluronidase, bis-cholinesters and, in cataract extracsympathetic ophthalmia after, 102 Iridocyclitis, 263 aureomycin treatment and, 882 tion, 429 in ophthalmology, 877 Bydergine, hypertensive retinopathy due to, 450 in glaucoma, 445 in retinal vascular disturbances, 891 band keratopathy in, 264 cataract after, 268 IRIS: atrophy, glaucoma and, surgical treatment, 881 bombé, in discission operations, 887 Hydrazide of nicotinic acid: See Isoniazid Hydrocephalus, anterior-segment hypoplasia and, 451 cysts of, after miotics, 445 myopia, uveitis, and, in twins, 263 diathermy coagulation to treat, 513 Hydrophthalmos, operative treatment of, 445 implantation, 723 Hypercalcemia, eye findings in, 856 heterochromia ot, 263 Hypercholesteremia, fundus in, 118 gonioscopy in, 264 Hyperphoria, nystagmus and, 593 lipids of, 745 Hypertension, diabetes me pathy, 450 essential, eye signs in, 608 melanoma of, 597, 756 diabetes mellitus, and diabetic retinotumors of, gonioscopy in diagnosing, 263 IRITIS: after glaucoma operations, 598 congenital cataract and, 443 eye changes of, diastolic blood pressure and, 760 Hyphema, after cataract extraction, 887 bilateral with poliosis, 265 in sarcoidosis, 566 traumatic, 881 Hypotony, acute, 241 luctic-allergic, 881 Iseikonic lenses, prescription of, 435 ISONIAZID: 129, 749 Idioey, amaurotic, 902 diffusion in aqueous, 119 effect in eye disease, 117 in experimental tuberculosis, *199 in tuberculous uveitis, 445 late infantile, 470 Illumination; See Light Illustrating lectures, 611 Images, multiple in one-eyed man, 107 IMPLANT, buried movable, 762 fixation of after enucleation, 278 orbital, amber, 278 Japan, postwar ophthalmology in, 413 improved, 93 Keratitis, band-shaped, "crocodile skin," corneal denew material for, 895 polyvinyl sponge for, 278 generation and, 258 herpetic, meningitis secondary to, 283 Infants, premature, eyes in, 760 postnatal cataracts in, 65 interstitial, corticotropin in, 443 retrolental fibroplasia in: See Retrolental Fibroplasia testing vision of, 714 cortisone in, 443 testosterone in, 443 Inflammations, anterior-segment, study of anterior angle in, 622 thyroid in, 443 parenchymatous, glaucoma and, 442 trypsin in, 84 INJURIES: boxing, 40 rosacea, cataract extraction in, 879 corneal transplantation in, 879
KERATOCONJUNCTIVITIS: epidemic, histologic excalcium, 899 chemical, 281 amination in, 879 observations on four cases, 486 eye, in adults, 281 foreign body: See Foreign Bodies present status, 476 of cavernous sinus, 602 erologie studies in, 49 of eyelids, burns, 281, 605 phlyctenular, nontuberculous, 260 periangiitis, scleritis, and, 880 perforating, penicillin in, 449 stab-wound, 899 INSTRUMENTS: adaptometer, automatic recording, 586 sieca, 283 in aged, 238 clamp for corneal transplantation, 438 coupling, for cataract knife, 403 Keratoconus: See Cornea, conical Keratoglobus, keratoconus, and megalocornea, 755 for diathermy current, 403 diagnostic, portable transformers for, 563 electrolysis-iontophoresis unit, 719 Keratography, 880 Keratopathy, band, iridocyclitis and, 264 Keratoplasty: See Corneal Transplantation electronic tubes for direct current, 592 fluorophotometric, to study anterior chamber, 125 for cataract extraction, 518 LACRIMAL APPARATUS: canal, polyethylene tubing in, 438 duct, obstructions of, 279 intracapsular forceps, 564 lid retractor for cataract extraction, 438 microscope for surgery, 437 office treatment tray, 95 plastic cannula for, 125 radiography of, 897 orbital retractor, 91 reconstruction of, using Supramid tubes, 279 eyelids, conjunctiva, and: a review, 279 passages, probing of, 897 radiography of, 897 perimeter attachment for flicker perimetry, 126 speedlight unit for photography, 396 sterilization of sharp, 435 to study eye in monochromatic light, 68 reconstruction of, with plastic tube, 605

LACRIMAL APPARATUS (continued) MELANOMA (continued) sac, endonasal probing of, 895 of iris, 597, 756 obstruction of, prophylactic treatment for, \$70 of uvea, diathermy in, 889 See also Dacryodenitis, etc. radiation therapy of, 606 Lagophthalmos, corneal protection in, 880 Leber's disease, eye findings in, 275 Melanosis, of choroid, 280 of conjunctiva, 280 Lectures, illustrating, 611 LENS: abnormal development of human, 743 and vitreous: a review, 446 capsule, healing of, lens-induced endophthalmitis and, *205 phase-contrast study of, 423 polysaccharides of, *165 Microphthalmos, 716 Mikulicz's disease, 88 changes, in chorioretinal degenerations, 746 cystoid spaces in, 270 ectopia of, 609 congenital, 758 iris cysts after, 445 familial, 285 in Marfan's syndrome, 269 Morocco, eye study in, 286 effect beta radiation on rabbit, 119 epithelium, phase-contrast study of, 424 phenomena of, 724 exfoliations, and glaucoma, 757 fermental respiration of, 429 fibers, phase-contrast study of, 424 hydration, role metabolism in, *182 in region of lenticonus, 446 immunity to tumor, 269 involvement in generalized argyrosis, 402 imbalance, test for, 432 lipids of, 745 metabolism of, effect glutamic acid on, "148 effect of oxygen on, °148 glucose in, *141 orthoptics: See Orthoptics reversible cation shift to study, "141, "148 prognosis in, 753 treatment of, 753 vitamin C, 121 nonfermental respiration of, 429 permeability, after scleral diathermy, 758 proteins, allergy to, 744 in chorioretinitis, 117 surgical treatment, 752 transparency of, after corneal paracentesis, 748 surgery, in exotropia, 178 See also under Strabismus aqueous chlorides and, 120 vitamin C metabolism of, 121 Lenticonus, posterior, 446 Lentiglobus, posterior, 758 Lidocaine, for akinesia, 78 for anesthesia, 78 Light, fluorescent, visual apparatus and, 431 ~ retinal lipoid extracts in, 590 intensity, response to, 584 surgical treatment of, 433 visual latency and, 430 monochromatic, study of eye in, 68
perception, in retina, 124
sense, melanophoric hormone, diencephalon, and, 600 Myxofibrema, of cornea, 756 Lipids, of eye, 745 Lipoids, action organ-specific on retinopathy, 745 London, trachoma in, 287 topical use of, 591 Lupus erythematosus, fundus lesions in, 900 Lymphosareoma, of uvea, 279 Lysozyme, corneal herpetic infections and, 118 in tears, electrophoretic determination of, 116 MACULA: changes of, coloboma of optic disc and, 892 degeneration, electroretinography in, 273 effect on ocular tension, 266 familial, 286 senile, 235 diseases of, Haidinger's brushes phenomenon to diagnosis, 661 drusen of, 236 false, treatment of, 878 stellate figure in region of, 505 Madrid Ophthalmological Society, 412, 571 Mandibulofacial dysostosis, status dysraphicus and, 451 hyperphoria and, 593 Marcus Gunn phenomenon, clinical studies of, 888 Marfan's syndrome, ectopia lentis and, 269 MELANOMA: malignant, 101 of choroid, 163, 445, 597 carcinoma of neck and, 898 operation for, 860 Hardy, LeGrand H., 249 of ciliary body, 104, 597 of conjunctiva, 280 Salzmann, Maximilian, 738 Sommers, Ignatius G., 869 of formix, 228

Memphis Society of Ophthalmology and Otolaryngology, Meningioma, at base of skull, eye symptoms, 603 pregnancy complicated by signs of 892 Migraine, vasodilators in ophthalmic, 892 Military, uveitis a problem of, 261 Mintacol, as mydriatic antagonist, 747 MIOTICS: in concomitant strabismus, 262 Mononucleosis, eye manifestations of, 450 Morgagni syndrome, angioma of retina and, 609 Movements of the eye: electro-oculography to study, 752 Multiple sclerosis, hemianopsia in, 602 Mumps, intraocular infection with virus of, 744 MUSCLES of the eye: electromyograms of, 753 extraocular, influences atropine on balance of, 438 influence pilocarpine on balance of, 438 insertion of, and retinal tears, 275 operations, recession under Tenon's capsule, 441 resection or recession, 5-year study, 547 palsy, after retrobulbar acetylcholine, 400 paralysis, extraocular, treatment of, 754 perception disturbances in 593 Myasthenia gravis, 284 MYDRIATICS: cyclopentolate hydrochloride as, 831 Mintacol as antagonist of, 747 Myeloma, of orbit, 762 MYOPIA: high, scleral resection in, 879 uveitis, debility, hydrocephalus, and, in twins, 263 Neoplasms, radioactive phosphorus to detect, 590 Neosone, in cataract complications, 201

Nerve, third, pupil abnormality and, 27 Neurofibromatosis, pheochromocytoma and, 449 See also Recklinghausen disease New England Ophthalmological Society, 410 New York Society for Clinical Ophthalmology, 235, 859 News Items, 127, 288, 452, 612, 763, 903 Nicotine, effect on angioscotoma, 266 Niemann-Pick disease, eye manifestations of, 889 Night blindness, electroretinography in, *70 Night driving, green windshields and, 123 Novesina, for surface anesthesia, 119 Nursing, ophthalmic, 609, 611, 902 Nutrition, deficiencies in, Bitot's spots in 22 patients with, 367
NYSTAGMUS: electro-oculography to study, 752 miners', vibration spectrum in, 440 operation for, 860

OCULAR TENSION: anterior-chamber restoration and, Orthoptics, 440 clinical, 878 consensual, study of, 118 cortisone and, *122, 266 during second half of night, 266 pitfalls in, 593 study by, before contact-lens fitting, 586
Orthoptist, intermittent strabismus from view of, 878
OXYGEN: effect on lens metabolism, *148 during surgery, 583 in retrolental fibroplasia: See Retrolental Fibroplasia effect of nicotine on, 266 effect of tetraethyl-ammonium on, 118 studies, pulseless disease and, 418 uptake in glaucoma, 884 fall in, after salicylic acid, 885 glaucoma and: See Glaucoma hypertension, glaucoma and, 266 influence ACTH on, *122, 655 Palpebral, fissure, nodule in, 108
fold, plastic construction of, 556
Pan-American Association of Ophthalmology: III interim influence cortisone on, *122 influence Diamox on, 884 meeting, 735 Parasites, Hypoderma bovis larva, 450 keratoconus and, 879 phasic variations in, tonography and, 757 aqueous outflow and, 629 PAS (para-aminosalicylic acid), use of, 428 pituitary and, after nicotine, 425 Penicillin, in perforating injuries, 449 radioactive, blood-aqueous barrier after, 117 after water, 425 regulation of, after iridencleisis, 598 Periangiitis, in form of scleritis, 880 Perimetry, 862 in glaucoma, 599 variations in, aqueous outflow and, 629 flicker fusion, 122 See also under Flicker fusion tonography and phasic, 757 Phacogenetic reaction, clinical signs and histology, 881 Phase-contrast study, of lens capsule, 423 of lens epithelium, 424 Oculosalivary syndrome, 285 Omnacillin (novocain, penicillin G, foreign protein), 437 OPERATIONS: a new trephining, 21
Baron Wenzel's for cataracts, 518 of lens fibers, 424 Denig's, in trachoma pannus, 258 Pheochromocytoma, neurofibromatosis and, 449 Philadelphia, College of Physicians, Section on Oph-thalmology, 241, 404 for nystagmus, 860 Krönlein, 603 Lindner-Guist, in retinal detachment, 890 Phosphatases, alkaline in ocular tissues, 116 histochemical study of (rabbit), 746 Ophthalmia, purulent, 594 sympathetic: See Sympathetic Ophthalmia in retina, histochemical localization of, 119 Phosphorus, radioactive (Pm), in diagnosis, 476 Ophthalmic definitions, 902 to detect intraocular tumors, *93, 590 Ophthalmic nursing: See Nursing Ophthalmodynamometry, in carotid lesions, 437 Ophthalmologists, education of, 610 Photography, speedlight unit for, 396 Pituitary, adenoma of, 721 public health and, 611 extract, exophthalmos-producing principle in, "107 Ophthalmology, in rural areas, 286 ocular tension and, after nicotine, 425 Ophthalmometer, in refraction, 407 after water, 425 sella turcica, to determine size of, 423 Ophthalmomyiasis, 283 Ophthalmoplegia, acute, differential diagnosis, 781 tumor of, notching optic chiasm in, 447 Plastic surgery, of eyelids, 279, 544 bilateral, posterior internuclear, 441 bilaterai, posterior internucicar, 44: external, progressive, 248
Optic canals, stenosis of, in craniopathy, 893
Optic chiasm, notching in pituitary tumor, 447
Optic disc, coloboma and macular changes, 892 of lower fornix, 75 of palpebral fold, 556 Plica semilunaris, fibrotic hypertrophy of, 444 Poliosis, iritis, and, 265 edema, pitfalls in diagnosis of, 601 Polish ophthalmic literature, 451 situs inversus with inferior conus and myopia, 854 OPTIC NERVE: atrophy, after prepartum hemorrhage, Polyethylene tubing, in lacrimal canaliculi, 438 Polysaccharide, of lens capsule, *165
Pregnancy, complicated by meningioma symptoms, 892
toxemia of, eye findings in child after, 283 in aged. 230 syphilitic, cortisone treatment, 601 Premature infants: See Infants nonpenicillin treatment, 601 Priscoline, in glaucoma tests, 885 Proctor, Francis I., Lecture, 453 penicillin treatment, 601 lesions of, due to tuberculous meningitis, cortisone Laboratories, dedication of, 866 in, 751 Medal, remarks on acceptance of, "3 Proteins, gelatinous of vitreous, 584 in blood, in diabetic retinopathy, 283 retina and: a review, 601 Optic neuritis, retrobulbar: See Retrobulbar neuritis Optic papilla, earcinoma of, 607 in diet, cataract and, 430 in lens, in chorioretinitis, 117 Opticomalacia, 275 Optics and visual physiology: a review, 750 ORBIT: angioblastoma of, 898 Pterygium, 754 cyst formation on, 756 cylindroma of, 604 etiology of, 632 cysts of, 761 treatment of, 682 epithelioma of, 894 Ptosis, Blaskoviez operation in, 896 exenteration of, 277, 762 surgical methods in, 129 fibroma of, 604 surgery for, 605 fracture of, diplopia correction after, 441 granuloma of, 86, 280 implants: See Implants results in 162 cases, 129 Public health, ophthalmologist and, 611 Pulseless disease, 418 PUPIL: Argyll Robertson, after herpes zoster, 23 myeloma of, 762 stab wounds of, 899 unilateral, pathogenesis of, 209 surgery of, results in, 447 significance of, 34 tumors of, 280, 604, 762, 894, 898 contraction, during cataract extraction, 269 efferent pathways of, 23 X-ray diagnosis, 278 in vegetative dystonia, 447 reactions, pathologic changes in, 893 reflexes of, 761 veins of, radiography of, 762 Orbitonometer, clinical use of Copper's, 278 Orbitonometry, 895

RETINA (continued)

RADIATION: cataract due to, ciliary body in, 673 THERAPY: beta, 876 cataract formation after, 465 corneal protection in, 428 effect on rabbit lens, 119 in Bowen's disease, 652 of melanomas, 606 X-ray; See X-rays Radioactive phosphorus: See Phosphorus Radiography, of lacrimal ducts and passages, 897 of orbital veins, 762 See also under X-rays Radium therapy, in retinoblastoma, 607 Rayleigh's equation, 124 Raynaud's disease, 284 Recklinghausen disease, angioma of conjunctiva with, 280 pheochromocytoma and, 449 REFRACTION: age and change of, 123 anomalies, influence on depth perception, 587 retinal sensitivity in, 586 changes, after seleral resection, 587 age and, 123 diplopia technique, for balanced, 562 errors, in adolescents, vocations and, 451 in aged, 240 in identical twins, 435 strong reading additions, for subnormal vision, 362 Refractometer, clinical evaluation of Rodenstock, 584 Retraction syndrome, 752 RETINA: and optic nerve: a review, 601 aneurysm of, 446 angioma of, Morgagni syndrome and, 608 angiomatosis of, 275 arterioles, sclerosis of, 236
ARTERY: occlusion of, electroretinography in, 272 ocular palsy after, acetylcholine for, 440 pressure, during surgery, 583 atrophy of, gyrate, 260 blood vessels of, and aorta coarctation, 271 changes, in amaurotic idiocy, 470 circulation, blood current in, 447 electroretinography in disturbances of, 272 DEGENERATION: anterior dialysis and, 891 tapeto-, 572 diagnosis of, 890 pathogenesis of, 890 urinary studies in, 890 DETACHMENT: 97, 861 annular peripheral, 601 climatic factors in, 274 clinical considerations, 760 diathermic chorioretinitis in, 271 diathermy in, results with different forms of, 891 meteorology and, 274 operations, in aged, 238 scleral reefing in, 880 scleral resection in, 273, 410, 446, 890 meridional lamellar, 777 refractional changes after, 587 surgical treatment of, development, 889 therapeutic considerations, 760 traumatic, 273 effect illumination variations on, 588 elastosis of, visual functions and, 272 glycogen-phosphatase in, 428 histochemical studies of, 424 image, motions of during refraction, 587 lateroversion of, 274 light perception in, 124 lipids of, 745 metabolism of, influence ACTH on, 117 periphlebitis of, toxoplasmosis and, 759 phosphatase in, histochemical localization of, 119 pigment epithelium of, ultrastructure of, 114 pseudotumor of, 601 sensitivity of, after light flashes, *60

in refraction anomalies, 586

syphiloma of, 600 tears, insertion extrinsic muscles and, 275 vascular system, diseases of, chestnut extract in, 888 disturbances, Hydergine in, 891 in diabetics, 889 patterns in, 114, 423 veins, blood pressure of, 747 occlusions, 116, 236 thrombosis, course of, 600 thrombophilia and, 889 trypsin in, 84 Retinal correspondence, 122 RETINITIS: exudativa, 852 nephrogenic, 887 pigmentosa, conical cornea and, 901 endocrine disturbances and, 275 unilateral, 600, 888 vitamin B₁₂ and (experimental), 759 serous central, 759 Retinoblastoma, elinicopathologic study, 222 fate of patients with, 891 radiologic examination in, 760 radium disks to treat, 607 radon seeds to treat, 607 Retinopathy, action organ-specific lipoids on, 745 diabetic: See Diabetic Retinopathy hypertensive. Hydergine in, 450 vasodilators and, 237 sickle-cell disease and, 204 Retrobulbar neuritis, psychogenic allergy and, 115 uveitis, glaucoma, and, 615 RETROLENTAL FIBROPLASIA: 243, 272, 273 animal experiments in, 270 anterior dialysis and, 891 birth date and, 317 carbon dioxide in, therapeutic possibilities, 342 causative factors in, 317 cicatricial stage of, 308 degree prematurity and, 317 electroencephalography in, 337 general health and, 317 OXYGEN in: 274 level of, and, 273 studies of, 291 pulseless disease and, 418 therapy, 317 pathologic basis of, 888 rophylaxis, 889 Ridley intraocular lens, experiences with, 270, 887 reports on use of, 270 See also Acrylic Lenses Rosacea: See under Keratitis Rural ophthalmology, 286 Rutin, in diabetic retinopathy, 890 Salzmann, Maximilian, 738

Sarcoidosis, iritis in, 566 Sarcoma, of uvea, basophilia of, 898 Schlemm's canal, drainage of, 848 SCLERA: cornea and: a review, 443 diathermy to, lens capsule permeability after, 758 grafting, in choroidal hernia, 595 pigmentation of, in alcaptonuria, 879 reefing of, in retinal detachment, 880 resection, in high myopia, 879 in retinal detachment: See Retina, detachment stereophotogrammetric reproduction of, 750 Scleritis, periangiitis and, 880 Sclerosis, tuberous, 573 Sclerotomy, in glaucoma, 884 Scotoma, annular, subjective symptoms of, 602 luminogenic, to treat false macula, 878 Scrofulous diseases, 287 Sella turcica, to measure pituitary, 423 Selsun, in blepharitis marginalis, 560

Senility, color changes in, 434 Thyrotoxicosis, exophthalmos of, 7 juvenile, 279 See also Aged Tissues of eye, alkaline phosphatases and, 116 Tonography, phasic variations in, 598, 757 XVII International Congress of Ophthalmology, 247, 575, 728 Sickle-cell disease, retinopathy and, 204 vitreous hemorrhage and, 204 Tonometers, applanation, 592 standardization of, 863 Tonometric measurement, aqueous elimination and, 116 Torsion, 406, 753 Siggren's syndrome, 283 Sjøgren's syndrome, 283
See also Keratoconjunctivitis sicea
Society Proceedings, 97, 235, 404, 566, 721, 859
Socket, infection of, Varidase in, 448
Sodium proprionate, in external eye disease, 877
Sommers, Ignatius G., 869
Spectacles, iseikonic, prescribing of, 435
contact: See Contact Lenses false, 593 TOXOPLASMOSIS: 194 adult, 424 chorioretinitis and, 261, 264 serologic data in, 262 congenital, 608 Status dysraphicus, mandibulofacial dysostosis and, 451 Stereoscopic, image, measurement by haploscopic pictures, exophthalmos with, 604 retinal periphlebitis and, 739 TRACHOMA: 443 chloramphenicol in, 256 classification of, 257 movies, 752 Sterilization, of sharp instruments, 435 Stevens-Johnson syndrome, 668 STRABISMUS: blindspot mechanism in, 765 electrocoagulation in, 255 etiology of, 257 concomitant, miotics in, 862 experimental, 258 operation for, 439 Gantrisin in, 260 prognosis of, 439 Greek legislation against, 287 treatment of, 439 in Egypt, 286 vertical component in, 439 in London, 287 current approach to, 440 diagnosis in, method of concordance for, 440 esotropia, 191, 567 in Negroes, pigmentation of Herbert's pits in, 260 in southern Iran, 665 new concept of, 754 exotropia, diagnosis in, 58 surgery for, 178 pannus of, changes in after trauma, 442 Denig's operation for, 258 intermittent, orthoptist view in, 878 pathology of, 259 rapid treatment of, 443 recovery from, diplopia after, 877 review of, 332 treatment of, 434 orthoptic: See Orthoptics sulfonamides in 257 Streptokinase, experimental study of, 426 and antibiotics, 442, 588 streptodornase (Varidase), in socket inflammations, virus of, research on, 424 Trichinosis, 450 Trypsin, in inflammations, 84 Streptomycin, in tuberculosis, 125 in thrombosis, 84 Tuberculosis, cortisone in, 751 Subarachnoid hemorrhage, 501 Sulfathiazole, corneal changes after, 442 Sulfonamides, in trachoma, 257 Surgery, microscope for, 437 sterile air in, 589 experimental, 425 isoniazid in, *199 See also under Isoniazid general surgery and, 568 Sutures, corneoscleral, 592 streptomycin in, 125 track, 592 radial, chromic gut, in corneal transplantation, 349 tests for, intradermal and percutaneous, 876 repair of cut McLean, 398 Swan, Kenneth C., *2 Tularemia, oculoglandular, 448 TUMORS: 449 at base of skull, eye symptoms of, 603 carcinoma: See Carcinoma biographical data, "5 publications of, "6 Swiss Ophthalmological Society, 860 diathermy in intraocular, 898 Sympathetic ophthalmia, 881 epibulbar, 280 after iridencleisis, 102 intraorbital, 277 keto-enol substance in urine in, 261 lens immunity to, 269 treatment of, 427 Syndromes, Albers-Schoenberg, 285 oculosalivary, 285 Melanoma: See Melanoma of adnexa, 860 of caruncle, 896 of cavernous sinus, 602 of choroid, **97, 163**, 280, 444, 445, 448, 449, 597, 898 of ciliary body, **104**, 597 Tarsus, excision of, in ectropion luxurians, 226 Tearing, in aged, 238 gonioscopy in diagnosis of, 263 of conjunctiva, 280 Tears, congenital absence of, 896 crocodile, 276 of eye, 860 of eyelid, 606 lysozyme in, electrophoretic determination of, 116 See also: Keratoconjunctivitis sicea; Sjøgren's synof fornix, 228 drome of iris, 597, 756 Teeth, eye signs uncrupted in infants, 448 gonioscopy in diagnosis of, 263 Temporal arteritis: See Arteritis, temporal of optic papilla, 607 Terramycin, in ophthalmology, 902 Testosterone, in syphilitic interstitial keratitis, 443 of orbit, 280, 604, 762, 894, 898 X-ray diagnosis of, 278 of pituitary, 721 Tetraethyl-ammonium, effect on ocular tension, 118 notching optic chiasm in, 40 of uvea, 279, 898 Therapy, of ocular allergy, 125 Thiouracil, causing exophthalmos, 761 influence on galactose cataracts, 426 diathermy in, 889 Three-dimension movies, psychologic aspects of, 433 Thromoplastin, in corneal diseases, 596 radiation therapy in, 606 radioactive phosphorus to detect, *93, 590 Thyroid, in syphilitic interstitial keratitis, 483 Twins, refraction in identical, 435 influence on galactose cataracts, 426 uveitis, debility, and hydrocephalus in, 263

T

Ultrasonic, impulses of eye, 748 Ultrastructure, of Descemet's membrane, 114 of retinal pigment epithelium, 114 Urinary melanophoric hormone, action of, 600 in hemeralopia, 890 in tapetoretinal degeneration, 899-Urine, keto-enol substance in, in sympathetic

Urine, keto-enol substance in, in sympathetic ophthalmia, 261 UVEA: diseases of, 261 lymphosareoma of, 279 melanoma of, diathermy in, 889

metanoma of, diathermy in, 809 oxygen uptake of, in glaucoma, 884 sarcomas of, basophilia of, 898 Uveitis, a military problem, 261 antihyaluronidase titers in, 262 antistreptolysin titers in, 262 due to Torula histolytica, 264 glaucoma, retrobulbar neuritis, and 615 granulomatous (experimental), *194 hypertensive, diathermy in, 596

in children, 262 isoniazid, in tuberculous, 445 myopia, debility, and hydrocephalus, in twins, 263 posterior hormone treatment in, 596

V

Vaccinia, of eyelids, 605 Varidase, in socket infections, 448
Vascular bed of eye, influence ACTH on, *122, 655 influence cortisone on, *122 Vascular patterns in eye, 591 Vasodilators, in ophthalmic migraine, 892 Veins of eye, physiologic constructions in, 845 Vernal catarrh: See Conjunctivitis, vernal Virus, mumps, intraocular infection with, 744 trachoma: See Trachoma vaccinia, experimental infections with, 115 VISION: binocular, fusion in, 121 increase in visual acuity in, 434 stereoscopic movies and, 585 suppression theory of, 431 testing, newer methods, 433 in aged, 235 loss of, gradual, 568 stereoscopic, 123 subnormal, strong reading additions for, 362 test, for infants' 714 Visual accidents, pulmonary collapse therapy and, 284 Visual acuity, birth weight and, 850 in binocular vision, 434

photovasodilator reflexes and, 750 Visual apparatus, electric responses of, 431

fluorescent light and, 431

metacontrast in, 584 red, in early glaucoma, 599

sensory motor function of, 586

Visual centers, vertebrate, 115 Visual effects, of green windshields, 123 Visual fields, after acute blood loss, 817 Visual functions, retinal clastosis and, 272
Visual latency, relation to light intensity, 430
Visual loss, during cardiac arrest, 749
Visual perception, disturbance of, in muscle paralyses, 593
filling-in process in, 588
vertical, factors influencing, 585
Visual performance, in mentally retarded children, 433
Visual physiology, optics and: a review, 750
Visual requirements, and modern travel, 610
Visual tests, for school children, 587
VITAMINS:
A: 592
in healing corneal ulcers, 810
B: distribution in aqueous, 117

in healing corneal ulcers, 810
B: deficiency of, visual degeneration due to
B: distribution in aqueous, 117
distribution in vitreous, 117
Bu: role in diabetic retinopathy, *53
C: dinitrophenol cataract and, 583
in aqueous in cataract, 118
in blood in cataract, 118
in physiology of color vision, 431
metabolism, in senile cataract, 446
of lens, 121
H: in herpetic infections, 595
Vitamins, deficiency of, in aged, 241
VITREOUS: amino acids of, 583

anterior pituitary hormone in, 117
detachment of, in aphakic glaucoma, 267
in malignant glaucoma, 267
discussion on, *37gelatinous proteins of, 584
hemorrhage, sickle-cell discase and, 204
implantation of, experimental, 758
lens and: a review, 446
pathologic changes in, clinical aspects of, *8
structure of, *21, *29
vitamin B, distribution in, 117
whitish mass in, 568
Vogt Koyanagi syndrome, 265, 881
treatment of, 427

W

Wernicke's disease, eye signs of, 447
Women, dark adaptation in, with genital disorders, 839
Wounds, rupture of, after cataract extraction, 887
stab, of orbit, 899

x

Xerophthalmia, 756 X-ray, diagnosis of orbital tumors, 278 examination in retinoblastoma, 760

Y

Yale University Clinical Conferences, 97, 568, 724

INDEX

Authors and Titles

of

Original Articles and Notes, Cases, Instruments

The asterisk (*) preceding the page number indicates that the paper was published in Part II of the July issue.

ABRAHAMSON, Ira A., Jr., and HORWITZ, Irving D.:
Acute ophthalmoplegia: A differential diagnosis, 781
ADHAULIA, H. N.: See AGARWAL, L. P.
AGARWAL, L. P., and ADHAULIA, H. N.: Role of
vitamin A in healing corneal ulcers, 810
ALFANO, Joseph E., and ROPER, Kenneth L.: Visual
disturbances following acute blood loss, 817
ALEXANDER, Robert L., and BALLEN, Peter H.:
Orbital retrestors

Orbital retractor, 91

ALLEN, Ruth: See BECKER, Bernard
APTER, Julia T.: The significance of the unilateral
Argyll Robertson pupil: Part I. A report of 13 cases, Argyll Robertson pupil: Part I. A report of 13 cases, 34; Part II. A critical review of the theories of its pathogensis, 269
ARRUGA, H.: Improved orbital implant, 93
ASCHER, K. W.: Study of 22 malnourished patients with Bitot's spots, 367
ASKOVITZ, S. I.: Portable transformers for diagnostic instruments, 563; An improved electrolysis-iontophoresia unit, 719

BALAZS, Endre A.: Studies on the structure of the vitreous body: Part I. The absorption of ultraviolet light, *21. See VARGA, Laszlo

ALLINTINE, Elmer J., and PETERS, Lawrence: Effects of intracarotid injection of a basic dye on the BALLINTINE, Elmer

ciliary body, *153
BARTLETT, Robert E.: Generalized argyrosis with lens

involvement, 402 BECKER, Bernard, ALLEN, Ruth, WINTER, Frank C., MAENGWYN-DAVIES, Gertrude, and FRIEDEN-WALD, Jonas S.: The role of the adrenal cortex and vitamin Bu in diabetic retinopathy, *53

BEDELL, Arthur J.: The stellate figure in the macular

REDELL, Artnur J.: Interception 1988

BLODI, Frederick, C.: See REESE, Algernon B.
BORENFREUND, Ellen: See DISCHE, Zacharias
BRECHER, Gerhard A.: Quantitative studies of binocular fusion, *134

BROMBERG, Y. M.: See LANDAU, I.

CACCAMISE, William Charles: Situs inversus of the optic disc: With inferior conus and variable myopia: A case report, 454
CAHAN, R.: See WAGMAN, Irving H.
CALLAHAN, Alston: Loss of the lower fornix of the anophthalmic socket, 75; Coupling for cataract knife

and diathermy current, 403; Senile ectropion: Analysis

of types and surgical correction, 787

CARBO, Richard J., Jr.: Office treatment tray, 95

CHAMLIN, Max: See COHEN, M. Harry

CHANCE, Burton: Baron Wenzel's operation: For the

extraction of cataract: With an exhibition of such

extraction of cataract: With an exhibition of such instruments as were used, 518
CHANDLER, Paul A.: See VERHOFF, Frederick H.
CHAPMAN, A. Zerne: See HENRY, Marvin D.
CHISHOLM, Julian F., Jr.: See ZACHARIAS, Leona
COCKBURN, T. Aidan: The present status of epidemic keratoconjunctivitis, 476
COCKBURN, T. Aidan, and DANIELSON, Ralph W.:
Epidemic keratoconjunctivitis: Observations on four cases, 486
COHEN, Louis B.: Use of School College.

COHEN, Louis B.: Use of Selsun in blepharitis mar-

ginalis, 560
COHEN, M. Harry, and CHAMLIN, Max: Uveitis with glaucoma and retrobulbar neuritis, 615

COLE, J. Gordon: Repair of severe entropion of the upper lid: A case report, 544
CORDES, Frederick C.: Endocrine exophthalmos: An evaluation of present knowledge: The Fourth Estelle Doheny Eye Lecture, 1; Temporal arteritis syndrome with content productions of two cases [asset]. with ocular involvement: A report of two cases, 455 CUSHMAN, Beulah, and WILLARD, Robert L.: Maxi-mum and minimum resection or recession: Results of a

five-year study, 547 CUSICK, Paul L.: Cyclodialysis with goniotomy in

congenital glaucoma, 712

DANES, Betty: See SCHWARTZ, Bernard DANIELSON, Ralph W.: See COCKBURN, T. Aidan DISCHE, Zacharias, and BORENFREUND, Ellen: Composition of the polysaccharide of the lens capsule and its topical distribution, *165

EAMES, Thomas H.: Correlation between birth weight and visual acuity: From the age of five through twelve vears. 8

EHRENBERG, Melvin H.: See GORDON, Dan M. ELLIS, George: See HAIK, George M.

FARPOUR, Mohamed: See LAZARUS, Alfred S. FEINSCHIL, L. B.: See WAGMAN, Irving H. FLYNN, Gregory, and RAIFORD, Morgan: Magnetic foreign body: Report of an intraocular case in which

removal was successful after 24 years, 90 FONDA, Gerald: Strong reading additions for subnormal

vision, 362

FORGACS, J.: See WEINSTEIN, Paul FORSTER, H. Walter, Jr.: The clinical use of the Haidinger's brushes phenomenon, 641 FORTIER, Edward G.: The therapeutic possibilities of

carbon dioxide in the prevention of retrolental fibroplasia, 342

FOWLE, Ann M. C.: See ORMSBY, H. L.

FRIEDELL, Hymer L.: See THOMAS, Charles I. FRIEDENWALD, Jonas S.: See BECKER, Bernard

GIFFORD, Edward S., Jr.: Horizontal excision of tarsus: In the correction of ectropion luxurians, 226

GIVNER, Isadore: Coats' disease (retinitis exudativa): A clinicopathologic study, 452

GOODMAN, Doris: See POTTS, Albert M. GOODSIDE, Victor: Ocular findings in hypercalcemia,

GORDON, Dan M., and EHRENBERG, Melvin H.: Cyclopentolate hydrochloride: A new mydriatic and cycloplegic agent: A pharmacologic and clinical evaluation, 831

atton, 531
GRANDI, Joseph: See JACOBIUS, Henry F.
GREEN, Harry, and LEOPOLD, Irving H.: Investigation of corticosteroids in the aqueous humor of normal
animal eyes, *101
GUY, Loren P.: Postnatal cataracts in premature in-

fants, 65

GUYTON, Jack S.: See RUSSELL, Dan A., Jr.
GWATHMEY, Tayloe, and HAVENER, William H.:
Diplopia technique for obtaining balanced refraction,

HAIK, George M., LYDA, Wood WAUGH, Richey, L.,

Jr., and ELLIS, George: Cataract formation following beta-ray radium therapy: Report of four cases, 445 IARRIS, John E., HAUSCHILDT, James D., and NORDQUIST, Loretta T.: Lens metabolism as studied HARRIS

NORDQUIST, Loretta T.: Lens metabolism as studied with the reversible cation shift: I. The role of glucose, '141; II. The effect of oxygen and glutamic acid, '148 HARTZ, Philip H.: See MORALES, Pedro Pablo HASSOUNA, M. A. L.: Trachoma in brief, '332 HAUSCHILDT, James D.: See HARRIS, John E. HAVENER, William H.: See GWATHMEY, Tayloc

HEATH, Parker: Clinical pathologic conference, 88, 222
HENRY, Marvin D., and CHAPMAN, A. Zerne: Vitreous hemorrhage and retinopathy associated with sickle-

cell disease, 204

HOLLAND, R. W. B., and LEPISTO, Victor E.:
Cortisone and Neosone in complications following
cataract surgery, 201

HOPEN, Joseph M.: Use of parenteral trypsin in acute inflammatory and thrombotic ocular disturbances, 84 HORWITZ, Irving D.: See ABRAHAMSON, Ira A., Jr. HULTIN, M., and KORNERUP, T.: An apparatus for investigation of the eye: In monochromatic light with interference filters, 65

JACOBIUS, Henry F., and GRANDI, Joseph: Choroiditis with lymphocytic choriomeningitis, 231

JAKUS, Marie A.: Studies on the cornea: I. The fine structure of the rat cornea, *40

Structure of the rat cornea, 40
JIM, Vernon K. S., and KRAUSE, Arlington C.: Electroencephalography in retrolental fibroplasia, 337
JOHNSON, Carl Cordes: Blepharoptosis: A general consideration of surgical methods, with the results in 162 operations, 129

JONES, Lester T.: Epiphora: Its causes and new surgi cal procedures for its cure: A preliminary report, 824 JOHNSON, Lorand V.: See POTTS, Albert M.

KAMEL, Sabri: The Pterygium: Its etiology and treat-

KATZIN, Herbert M.: See LaTESSA, Anthony, J. KAUFMAN, Samuel I.: Repair of a cut McLean suture,

KING, Merrill J.: See ZACHARIAS, Leona

KIRBY, Daniel B.: Use of direct radial mild chromicgut sutures in penetrating keratoplasty, 349

KLIEN, Bertha A.: Late infantile amaurotic idiocy: A clinico-histopathologic study, 470
KNAPP, Philip, and von SALLMANN, Ludwig: Treatment of experimental ocular tuberculosis with isoniazid,

*199
KORNERUP, T.: See HULTIN, M.
KRAUSE, Arlington C.: See JIM, Vernon K. S.
KRAVITZ, Daniel: A further study of the anterior
angle: In anterior-segment inflammation of the eye, 422
KROHMER, Jack S.: See THOMAS, Charles I.
KRONFELD, Peter C.: Delayed restoration of the
anterior chamber: The Eighth Proctor Lecture, 453
FRONNING Eric: Conjunctival and corpeal stainshifty.

KRONNING, Eric: Conjunctival and corneal stainability with Bengal rose: After instillation of local anesthetics in human eyes, 351

LANDAU, I., and BROMBERG, Y. M.: Dark adaptation in disorders of the genital function in women, 839
LaTESSA, Anthony J., TENG, C. C., and KATZIN,
Herbert M.: The histochemistry of the basement mem-

Herbert M.: The histochemistry of the basement membrane of the cornea, 171

LAZARUS, Alfred S., and FARPOUR, Mohamed: Relative frequency and mass treatment of trachoma in southern Iran, 468

LEBENSOHN, James E.: Lid paresis induced by oculomotor akinesia, 395

LEINFELDER, P. J.: See SCHWARZ, Bernard

LEOPOLD Irving H. See GREEN Harry.

LEOPOLD, Irving H.: See GREEN, Harry LEPISTO, Victor E.: See HOLLAND, R. W. B. LUHR, John P., and SCHLOSSMAN, Abraham: Inter-

mittent and accommodative esotropia: A study of 74 cases, 191 LYDA, Wood: See HAIK, George M.

LYDA, Wood, and WAUGH, Richey L., Jr.: Healing of the posterior lens capsule and lens-induced endoph-thalmitis, *205

MAENGWYN-DAVIES, Gertrude: See BECKER, Bernard MANSCHOT, W. A.: Subarachnoid hemorrhage: Intra-ocular symptoms and their pathogenesis, 501 MASCATI, Naumann T.: Bowen's disease, 652

MASTERS, Stanley: Toxoplasmosis: A report of the literature and clinical studies based on five cases, 184 MEEK, Raymond Emory: Meridional lamellar scleral resection: In separation of the retina, 777 MORALES, Pedro Pablo, and HARTZ, Philip H.: A rare malformation of the eyes, 716

NAIDOFF, David: See WAGMAN, Irving H. NAQUIN, Howard A.: Argyll Robertson pupil: Following herpes zoster ophthalmicus: With remarks on the efferent pupillary pathways, 23 NOELL, Werner K.: The origin of the electroretinogram,

NORDOUIST, Loretta T.: See HARRIS, John E.

ORMSBY, H. L., and FOWLE, Ann M. C.: Epidemic keratoconjunctivitis, 490 OZANICS, V.: See SMELSER, George K.

PATON, R. Townley: Intracapsular forceps, 564 PATZ, Arnall: Oxygen studies in retrolental fibroplasia: IV. Clinical and experimental observations. The first Edward L. Holmes Memorial Lecture, 291

PETERS, Lawrence: See BALLINTINE, Elmer J.
PILLAT, B.: See von SALLMANN, Ludwig
PITTAR, C. A.: A technique of corneal grafting developed in New Zealand, 69

POTTS, Albert M., GOODMAN, Doris, and JOHNSON, Lorand V.: The nutritional supply of the corneal regions in experimental animals: III. Further studies on the corneal transport of inorganic ions, *174
POWERS, M. M.: See von SALLMANN, Ludwig
PUNTENNEY, Irving, and SHOCH, David: The ciliaty

body in radiation cataract, 673

REESE, Algernon B., and BLODI, Frederick C.: Hematopoiesis in and around the eye, 214 REESE, Algernon B., and STEPANIK, Josef: Cicatri-cial stage of retrolental fibroplasia, 306 REESE, Frederic M.: Bilateral homonymous hemianopsia,

REYNOLDS, William E.: See ZACHARIAS, Leona RIGGS, Lorrin A.: Electroretinography in cases of night

blindness, *70

Bindness, '70
RONES, Benjamin, and LINGER, Harry T.: Early malignant melanoma of the choroid, 163
ROPER, Kenneth L.: See ALFANO, Joseph E. RUSSELL, Dan A., Jr., and GUYTON, Jack S.: Retrobulbar injection of Lidocaine (Xylocaine®) for anesthesia and akinesia, 78

von SALLMANN, Ludwig: See KNAPP, Philip von SALLMANN, Ludwig, PILLAT, B., and POWERS, M. M.: The influence of ACTH and cortisone on the reactivity of the terminal vascular bed in the eye, *122; Further studies on the influence of ACTH on the reactivity of the terminal vascular bed in the eye, 655 SAYOC, Burgos T.: Plastic construction of the superior palpebral fold, 556

SCHAEFFER, Alexander J.: Malignant melanoma of the

schizerers, Alexander J.: Maingaint metanoma of the upper conjunctival fornix, 228
SCHEPENS, Charles L.: Clinical aspects of pathologic changes in the vitreous body, *8; General discussion on the vitreous, *37
SCHLAEGEL, T. F., Jr., and WILSON, Fred M.: Experimental granulomatous uveitis: Studies on the

mechanism of production of the contralateral reaction after the use of horse serum in rabbits, *194

SCHLOSSMAN, Abraham: See LUHR, John P.

SCHWARTING, Bland H.: Testing infants' vision: An apparatus for estimating the visual acuity of infants

and young children, 714
SCHWARTZ, Bernard, DANES, Betty, and LEIN-FELDER, P. J.: The role of metabolism in the hydra-tion of the isolated lens and cornea, *182

SHOCH, David: See PUNTENNEY, Irving
SMELSER, George K., and OZANICS, V.: Studies on the
nature of the exophthalmos-producing principle in pituitary extracts, *107

SOUDAKOFF, Peter S.: Bacteriologic examination of

SOUDANOFF, Feter S.: Bacteriologic examination of the conjunctiva: A survey of 3,000 patients, 374 STADNIK, Louis J., and McFADDEN, Harry W., Jr., Harada's disease: A case report, 232 STEPANIK, Josef: Diurnal tonographic variations and their relation to visible aqueous outflow, 629. See REESE, Algernon B.

STORAASLI, John P.: See THOMAS, Charles I.

SUGAR, H. Saul: The mechanical and the neurovascular schools in the mechanism of primary glaucoma, 645

SWAN, Kenneth C.: Remarks on acceptance of the Proctor Medal Award, June, 1953, "3; The blindspot mechanism in strabismus. The tenth Sanford R. Gifford Lecture, 765

SWANN, H. G.: The physiologic constrictions in the ocular veins, 845

TENG, C. C.: See LaTESSA, Anthony J. THOMAS, Charles I., KROHMER, Jack S., STORAASLI, John P., and FRIEDELL, Hymer L.: Detection of intraocular tumors by the use of radioactive phosphorus,

TURTZ, Charles A .: Visual toxic symptoms from digitalis,

ULLMAN, Egon V.: Albrecht von Graefe: The man in

his time: Part I, 525; Part II, 695; Part III, 791 URIST, Martin J.: Exotropia with bilateral elevation in adduction: Part I. Diagnosis, 58; Part II, Surgery,

VAIL, Derrick: Treatment of cysts of the iris with diathermy coagulation, 513

VARGA, Laszlo, and BALAZS, Endre A.: Studies on the structure of the vireous body: Part II. Electrophoretic and sedimentation properties, *29

VERHOEFF, Frederick H., and CHANDLER, Paul A.:
A new trephining operation, 21

WAGMAN, Irving H., and NAIDOFF, David: A speed-

light unit for eye photography, 396
WAGMAN, Irving H., WALDMAN, Joseph, NAIDOFF,
David, FEINSCHIL, L. B., and CAHAN, R.: The recording of the electroretinogram in humans and in

animals: Investigation of retinal sensitivity following brief flashes of light, *40 WALDMAN, Joseph: See WAGMAN, Irving H. WAUGH, Richey L., Jr.: See HAIK, George M. See LYDA, Wood

weinstein, Paul, and FORGACS, J.: Clinical aspects of permeability of the blood-aqueous barrier, 377 WILLARD, Robert L.: See CUSHMAN, Beulah

WILSON, Fred M.: See SCHLAEGEL, T. F., Jr. WINTER, Frank C.: See BECKER, Bernard

ZACHARIAS, Leona, REYNOLDS, William E., CHISHOLM, Julian F., Jr., and KING, Merrill J.: The incidence and severity of retrolental fibroplasia in relation to possible causative factors: Part I. Observa-tions on the occurrence of retrolental fibroplasia: Part II. Studies on the relationship of retrolental fibroplasia to degree of prematurity, oxygen therapy, general health and date of birth of premature infants, 317